

more businesses being 10 years or younger. The majority of FNP businesses studied were over 10 years old, with the oldest business being 63. Half of the businesses over 10 years old were in the 10–20 year bracket.

Half of the TNP businesses studied were still in original ownership, three had changed owner in the previous 10 years, and one had changed ownership in the previous 2 years. The majority (14) of FNP businesses studied were still in original ownership.

TABLE 9. PRINCIPAL PLACE OF RESIDENCE OF THE CONCESSIONAIRES INTERVIEWED IN 2004/05 OPERATING IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

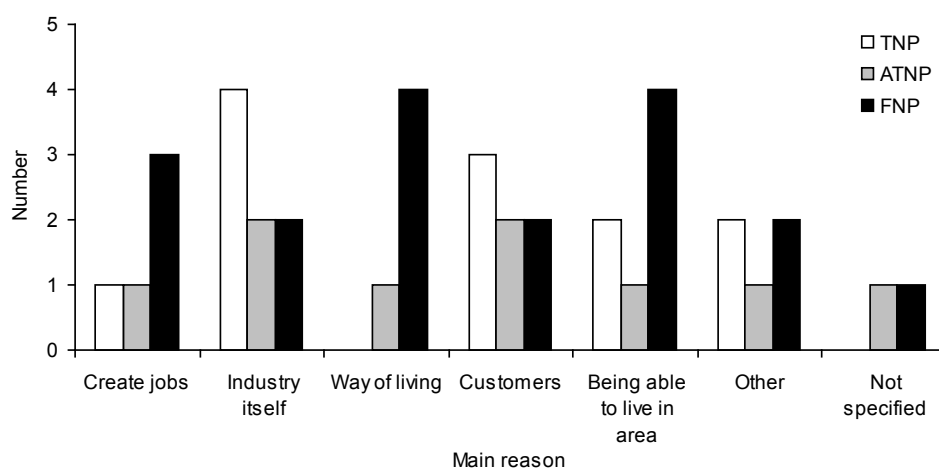
LOCATION	NUMBER		
	TNP	ATNP	FNP
In the region	11	9	16
<i>In the gateway community</i>	4	3	16
Elsewhere in New Zealand	2	1	2
Internationally	1	0	0
Total	14	10	18

Eleven of the 14 TNP business owners lived in the Taupo–Ruapehu region, including four operators based in the gateway community of National Park Village (Table 9). ATNP operators were predominantly based in the Nelson–Tasman region, including three operators based in the gateway community of Marahau. The majority of FNP business owners lived in the gateway communities of

Te Anau (13) and Manapouri (3); two FNP interviewees were based in Queenstown.

Interviewees expressed several reasons for working in the tourism industry. When asked to identify the main reason, operators identified ‘the industry itself’, ‘customers’ and ‘being able to live in the area’ as some of the main reasons (Fig. 2).

Figure 2. Main reasons given for being in the tourism industry by concessionaires operating in Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP) interviewed in 2004/05.



Half of the TNP and ATNP operators interviewed had worked in the tourism industry prior to their current position, while the majority of FNP operators had not. About half of all interviewees had worked in their respective region previously.

All TNP operators interviewed operated year round. Six of the 14 businesses did not have a specific high season for their total tourism product, while for four operators summer was the high season and for three winter was the high season. For the ATNP operators interviewed, summer was the high season, and all but one operated year round. Fifteen FNP operators considered summer to be their high season, and two operators did not have a specific high season for tourism products.

Table 10 summarises the characteristics of the concessioned tourism activity in each of the parks, based on data from the operator interviews.

TABLE 10. COMPARISON OF BUSINESS CHARACTERISTICS (OF THOSE OPERATORS INTERVIEWED IN 2004/05) IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

FEATURE	TNP	ATNP	FNP
Business maturity	Old and established	Young	Old and established
Ownership	Stable Majority are owner-operated	Recent changes to ownership Majority are owner-operated	Very stable Majority are owner-operated
Business size	Very small to very large	Generally small to medium, but recent arrival of large business	Very small to very large
Concession holder location	In the region	In the region	In the gateway community
Product type	Accommodation, guided walking, ski field and transport	Guided kayaking	Accommodation, attraction, guided activities (all), transport (air, land and water)
Season of operation	Winter and summer	Summer	Summer

6. Direct and total economic effects of concessions

The direct economic impact of the concessions in each park, in terms of employment, turnover, value added and household income, was estimated using data from the operator interviews. The total impact of these concessions on the district was then estimated using the method outlined in section 3.3. The total changes in direct visitor spending in the district(s) as a result of the concessions' existence is also estimated, in addition to the total net level of district economic activity that was generated by the concessions and that would not have existed in their absence. Where concession holders were involved in a mix of concessioned and non-concessioned activities, only that proportion of activities that related to their concessions was included. The estimates represent the concessionaires operating in the respective national park who were also based in the relevant region.

6.1 BUSINESS TURNOVER AND EMPLOYMENT

TABLE 11. DIRECT CONCESSIONAIRE EMPLOYMENT AND TURNOVER REPORTED IN 2004/05 FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

	TNP	ATNP	FNP
Output (\$million/year)	30.0*	4.6	51.0
Employment (FTE)	450†	53	320

* Study data were supplemented with information from DOC concessionaire returns to determine this figure.

† This is an estimate of the number of people employed by all concessioned operators operating in TNP and located in the Taupo-Ruapehu region.

In TNP, annual turnover (i.e. output) generated by concessioned activity was about \$30 million (Table 11). Four of the 14 operators interviewed relied completely on the concessioned product, whilst for a further five operators the concessioned products represented 10% or less of their total turnover. In the quiet season, however, six operators spent no time on the concessioned product (transport and guiding). The majority of the businesses were able to draw salaries.

In ATNP, annual turnover for the concessioned product was about \$4.6 million (Table 11). Of the ten operators interviewed, one relied completely on the concessioned product and, until their recent change in ownership (becoming part of much larger enterprise), three

kayaking companies also relied entirely on the concessioned product for turnover. Three of the business owners interviewed were unable to take drawings from their businesses.

In FNP, the concessioned product generated an annual turnover of about \$51 million (Table 11). Ten of the 18 operators interviewed relied completely on the concessioned product.

The total employment generated by the concession operators in TNP was 450 FTE staff (Table 11). As mentioned in section 4.1, the park has traditionally been a winter destination, and this seasonality was reflected in operator employment. Low season employment was about one-fifth of the annual number of FTEs, although this differed between concession types. The ski field was by far the largest employer and, per year, employed about 750 people. Over the

summer period, its employment was about 10% of the number of its winter FTEs. The accommodation providers experienced two distinct seasons (summer and winter) and the related summer employment levels were only slightly lower than winter levels. Employment levels of the transport operators were also fairly consistent between the two seasons if they were providers of transport for both skiers and walkers of the Tongariro Alpine Crossing Track. Guiding operations were more seasonal.

Total employment for the concessioned part of ATNP businesses was 53 FTEs (Table 11). This park has traditionally been a summer destination, and its seasonality was reflected in operator employment. Low season (winter) employment was about one-third of the annual number of FTEs.

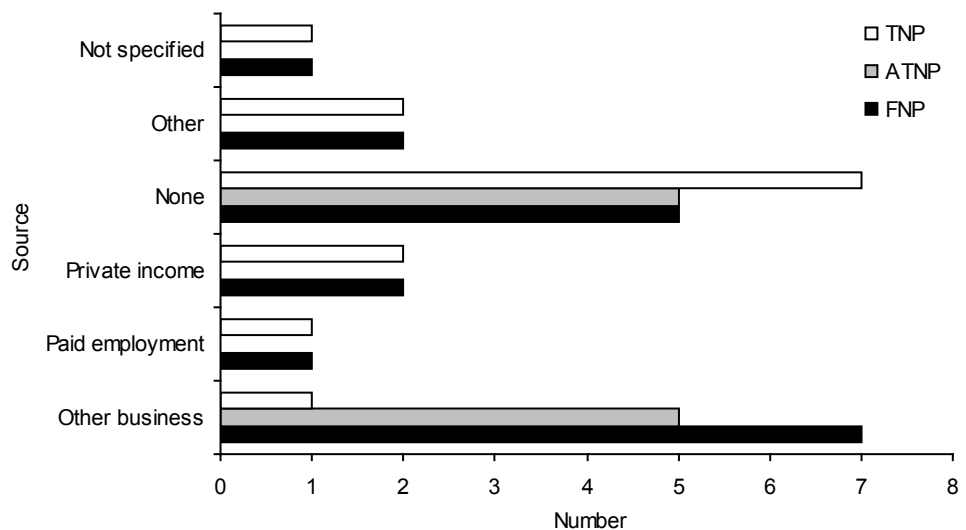
The concessioned product in FNP generated total employment of 320 FTEs (Table 11). Like ATNP, this park has also traditionally been a summer destination, and operator employment levels similarly reflected this seasonality: low season employment was about one-third of the annual number of FTEs. Two of the accommodation providers (on the Great Walks) were closed over the winter season and relied entirely on the summer months for this product. Both these providers were part of larger corporations.

Half of the TNP and ATNP business owners, and 12 FNP business owners interviewed derived income from other sources (Fig. 3).

When asked whether they employed local people, most of the operators interviewed stated that they employed members of the local, permanent population (if the person had the right skills). Employment of locals was seen to be beneficial, as permanent local residents already had accommodation, were more settled workers than short-term employees, lived nearby, had local knowledge and appreciated the area. Employing international staff was described as a necessity owing to the seasonal nature of employment (e.g. large numbers of staff were needed during the ski season). One operator commented that:

... we only employ locals, for local knowledge. We operate from Nelson on purpose. It is better for staff to live in Nelson so they can commute on company expense.

Figure 3. Other income sources of concessionaires interviewed in 2004/05 for Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).



Another operator said:

... everything we do, we try to source locally, i.e. goods, employment.

Reasons for not employing local people included special skills for management positions not being available locally and, as mentioned above, the seasonal nature of the work.

Most of the interviewees were able to recruit staff with the skills needed for their business. One operator commented that they had:

... absolutely no problems recruiting staff with the appropriate skills and that they are inundated with job applications.

Another said:

... we have never advertised for staff. People ring us so have really good staff and the feedback is that the staff are as good as it gets. We are proud of our staff and pay them reasonably well.

Skills considered important included being multi-skilled, being reliable, having industry qualifications and experience. One operator said:

... to attract people to an isolated situation like the mountain is a challenge and to retain staff is a challenge.

Indeed, a few operators commented that keeping staff was an issue:

Many can't make a living in Nelson full-time. The sector is very seasonal.

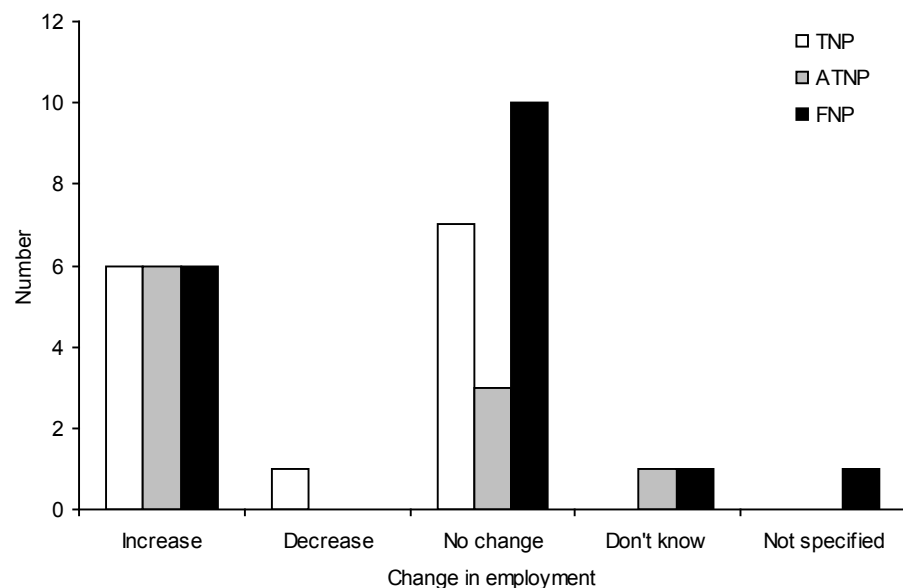
This was echoed by another operator who said:

Nelson has people crying out for full-time tourism work.

The requirement for specialist skills, a lack of accommodation, the high cost of living and, again, the seasonality of work were given as reasons for difficulty in employing the right staff.

Interviewees generally expected either no change in the number of people employed in their business in the next 2 years because business had stabilised, or an increase, as operators were actively growing their businesses (Fig. 4).

Figure 4. Expected change in employment according to concessionaires interviewed in 2004/05 for Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).



6.2 DIRECT EMPLOYMENT, OUTPUT AND VALUE ADDED IN CONCESSIONED BUSINESSES

Based on the data collected in 2004/05, the annual turnover and jobs generated by concessioned tourism activity in TNP generated in turn about \$14 million per year of value added, including \$11 million per year of household income and 450 direct plus 120 further FTEs (Table 12). These impacts were dominated by Ruapehu Alpine Lifts and accommodation at The Grand Chateau and Skotel Alpine Resort.

Concessioned tourism activity in ATNP generated \$2.4 million per year of value added (including \$1.6 million per year of household income) and 20 further FTEs, whereas for FNP the figures were \$21 million per year of value added, which included \$10 million per year of household income, and 55 additional FTEs (Table 12).

TABLE 12. DIRECT AND TOTAL ECONOMIC IMPACTS OF CONCESSION OPERATION IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP) (EXCLUDING IMPACTS OF LONGER VISITOR STAYS IN THE DISTRICT), BASED ON DATA FROM 2004/05.

	TNP TAUPO-RUAPEHU DISTRICT	ATNP NELSON-TASMAN DISTRICT	FNP SOUTHLAND DISTRICT
Output (\$million/year)			
Direct	30.0	4.6	51.0
Total in district	43.0	7.5	64.0
Employment (FTE)			
Direct	450	53	320
Total in district	570	73	375
Value added (\$million/year)			
Direct	14.0	2.4	21.0
Total in district	20.0	3.8	29.0
Household income (\$million/year)			
Direct	11.0	1.6	10.0
Total in district	14.0	2.3	14.0

6.3 TOTAL DISTRICT EMPLOYMENT, OUTPUT AND VALUE ADDED ASSOCIATED WITH CONCESSIONS

When applying economic multipliers for the Taupo-Ruapehu region, TNP's concessioned tourism generated total regional activity equivalent to \$43 million per year of output, 570 FTE jobs and \$20 million per year of value added, including \$14 million per year of household income (Table 12).

Similar calculations for kayaking and other activities in the Nelson-Tasman region found that ATNP concessioned tourism generated total regional activity equivalent to \$7.5 million per year of output, 73 FTE jobs and \$3.8 million per year of value added, including \$2.3 million per year of household income (Table 12).

For FNP, there was a significant error margin in the flow-on effects, principally because it was not possible to obtain detailed expenditure data from the main concessionaires. The data obtained, however, suggested that concessionaire expenditure patterns were markedly different from those of other businesses in the accommodation and guiding sectors for which data were available. It is believed that the multipliers used probably underestimated the total effects. Therefore, broadly relevant multipliers, derived from a Southland District economic model that was developed for this study, were used to estimate the total impact of the FNP concessions on the district (Table 13). The FNP concessioned tourism product generated total activity in the Southland District¹⁴ equivalent to \$64 million of output, 375 FTE jobs and \$29 million of value added, including \$14 million of household income.

Even though the concessions sector is made up of different tourism industries, and so several industry multipliers are applicable, a 'concessions tourism multiplier' can be estimated. Figure 5 shows the combined concessions tourism multiplier for each park. In TNP, for every dollar of output, a further 40 cents were circulated (output multiplier of 1.4), and for every concession job, another 0.30 jobs were generated (employment multiplier of 1.3). Every dollar generated by ATNP concessions output created a further 60 cents of spending and one concession job generated 0.40 jobs in the region, equating to a concessioned

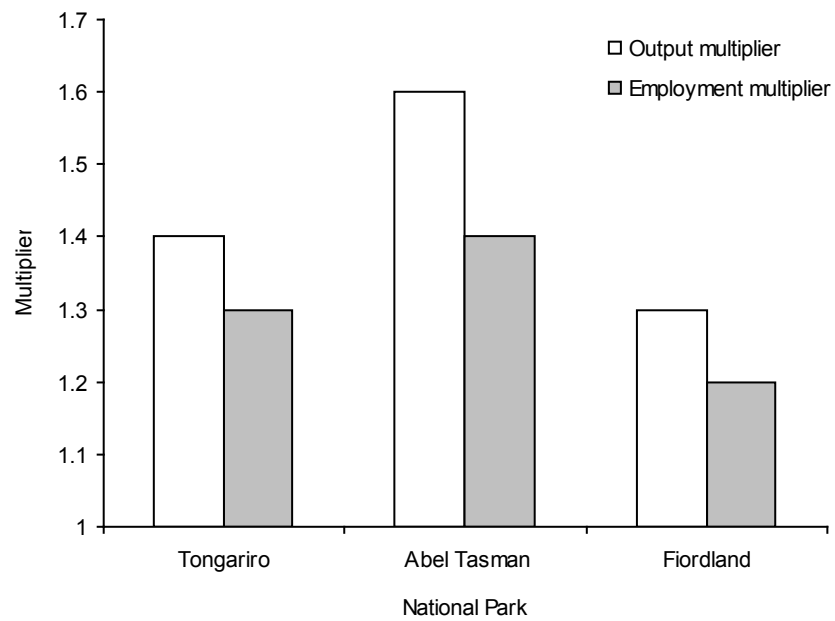
TABLE 13. DIRECT AND TOTAL ECONOMIC IMPACTS OF FIORDLAND NATIONAL PARK (FNP) CONCESSIONS ON THE SOUTHLAND DISTRICT FOR 2004/05.

Day = day visitors; o/night = visitors staying overnight; * = data suppressed for confidentiality reasons.

	OUTPUT (\$MILLION/YEAR)			EMPLOYMENT (FTES)			VALUE ADDED (\$MILLION/YEAR)			HOUSEHOLD INCOME (\$MILLION/YEAR)		
	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL
Direct	*	*	51	237	82	320	*	*	21	*	*	10
Total	44	20	64	276	100	375	20	9	29	9	5	14

¹⁴ A small proportion of staff was employed in Queenstown Lakes District, but it was not possible to estimate what proportion of the direct or total economic activity occurred in that district.

Figure 5. Comparison of output and employment multipliers for concessions operating in Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).



tourism multiplier of 1.6 for output and 1.4 for employment. A conservative concession multiplier for the FNP concessioned tourism product was 1.3 for output, and 1.2 for employment: in other words, every dollar of concession spending generated 30 cents of further spending in the region, and every concession job created a further 0.20 jobs.

These multipliers are consistent with the general tendency for multipliers of cities and small regions to be less than 1.5 (summarised in section 2.1), and are not unlike those cited in Table 1 for five New Zealand communities.

7. Expenditure and itinerary patterns of concession clients and net economic effects of concessions

Using the steps set out in section 3.4 and the findings from section 6, the total changes in direct visitor spending in the district(s) as a consequence of the concessions' existence were calculated. These changes in direct spending were then rated up by applying the relevant district multipliers to get the total net level of district economic activity that was generated by the concessions and that would not have existed in their absence.

When investigating the net economic impact of the concession-based tourism, it is important to note that the impacts of the concessions themselves cannot be added to the impacts resulting from changes in people's duration of stay, and hence spending, in the district(s). This is because the impacts of the concession itself may have had no effect on the district if people who could not purchase the concessioned product decided to purchase something else instead. To this extent, the concession impact is simply a transfer of impact within the district. On a district scale, what really matters is the impact of the concession on total spending in the district.

7.1 EXPENDITURE AND ITINERARY PATTERNS OF CONCESSION CLIENTS

In 2004/05, there were approximately 544 000 users of the concessioned product in Tongariro National Park (TNP), about 25 000 users in Abel Tasman National Park (ATNP) and about 600 000 users in Fiordland National Park (FNP). Caution needs to be applied to these figures, particularly those for FNP and TNP, as it is likely that a visitor to these parks may have used multiple concessioned products and services (as well as undertaking independent activities). The estimates of numbers of concession users are useful to begin to understand the proportion of the total number of park users that, during their visit to a park, use a concessioned product. The concessioned product in each of the three case studies appeared to be used primarily by international visitors, with the exception of the skiing activity in TNP. Operators identified the United Kingdom, Germany, the USA and Australia as the most common countries of origin of their clients.

Numbers of visitors to TNP in 2004/05 using the concessioned products were approximately 427 000 ski-field users (which included summer use), and about 117 000 transport, guiding and accommodation concession users combined (the latter results have been combined for reasons of confidentiality).

The number of ATNP concession users was approximately 25 000 kayakers (equivalent to 28 000 kayaker-days); other concessioned activity numbered less than 500 users.

Concession users at FNP numbered approximately 41 000 visitors staying overnight and 555 000 taking day trips. The major concessionaires in the park provided guided walking experiences, accommodation, water and land transport, kayaking, and flights. The majority of guided walks by number were day trips, but a very significant part of the income generated by concessions related to overnight walks, which include the Hollyford, Milford and Routeburn¹⁵ Tracks.

Respondents to the survey of concession clients at TNP included 99 people staying at concessioned accommodation and 355 using the transport concessions to walk the Tongariro Alpine Crossing Track. However, since some respondents were part of a group, the expenditure results are based on a sample of 1161 respondents (297 accommodation and 864 transport users). Visitors staying at concessioned accommodation were reluctant to be interviewed¹⁶, which meant that there is a higher error margin for the figures for users of overnight concessioned accommodation than for those using the transport concessions, although the estimates of daily expenditure and changes in stay duration were very similar for the two groups.

The majority of respondents were from other countries (Table 14).

TABLE 14. NUMBER AND PERCENTAGES OF RESPONDENTS IN 2005 USING CONCESSIONS AT TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BY ORIGIN AND TYPE OF CONCESSION.

Note: The number of respondents in each concession group does not necessarily reflect the relative sizes of the two populations.

ORIGIN	TNP		ATNP	FNP
	ACCOMMODATION	TRANSPORT	KAYAKING	DAY VISITORS
Within the region	1%	1%	0%	0%
Elsewhere in New Zealand	17%	7%	8%	6%
Internationally	82%	92%	92%	94%
Total (n)	99	355	248	224

The most common group size in TNP was two people (57%), followed by visitors on their own (19%). Groups ranged from 1 to 20 people, with 12 groups containing 10 or more people (groups comprised friends or tour groups). The average length of stay in the region was 3 nights. This pattern applied to both accommodation and transport users. No respondents expected to stay in the region for less than 24 hours.

The most common group size for ATNP was also two people (63%). The group size ranged from 1 to 28. The average length of stay was expected to be 4 nights (excluding two groups staying 31 nights and one group staying 35 nights). No respondents were expecting to stay in the region for less than 24 hours.

FNP's most common group size was also two people (59%). The average length of stay was 4 nights (excluding one group intending to stay 60 nights). There

¹⁵ Although not all of the Routeburn Track is in FNP.

¹⁶ This is possibly because the surveys were conducted at check-out. Other times were trialled, such as at check-in, mid-afternoon (as people were returning to their accommodation) and early evening (as people went to the bar to relax), but these were less successful.

were 23 respondents that were expecting to visit the region for the day only (less than 24 hours).

Table 15 shows the average expenditure by concession clients in the 24 hours prior to starting the activity.

TABLE 15. AVERAGE CONCESSION CLIENT EXPENDITURE PER DAY FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP) IN 2005.

Units = \$ per person per day.

EXPENDITURE CATEGORY	TNP		ATNP	FNP
	ACCOMMODATION	TRANSPORT	KAYAKING	DAY VISITOR
Accommodation	49.57	25.74	28.10	30.50
Transport	14.08	31.89	11.80	6.40
Restaurants, etc.	24.81	9.67	15.90	12.40
Retail	10.71	17.43	34.30	17.60
Entertainment	8.32	28.20	3.20	53.30
Miscellaneous	0.00	0.04	0.20	0.00
Total	107.49	112.97	93.50	120.20

Average daily expenditure at TNP by accommodation users was \$107.49, while transport users spent, on average, \$112.97 during the 24 hours prior to starting the walk. For those using the transport and guiding concessions, this would generally have included the cost of using the concession.

Concession kayakers in ATNP spent, on average, \$93.50 during the 24 hours prior to going kayaking (this excluded the cost of the concession if it had been pre-paid). While clients were in the park, they spent, on average, \$186, mostly on the concession or on water transport, although there was also some expenditure on accommodation and food.

On average, the FNP visitor spent \$120.20 during the 24 hours prior to being interviewed.

7.2 IMPACT OF CONCESSIONS ON CLIENT ITINERARY

Twenty percent of the TNP accommodation users would have changed their stay in the Taupo–Ruapehu region if the concessioned product had not been available. Of those, 61% would have changed their stay in the park. If the concession had not been available, the accommodation user would have stayed 1.01 fewer days in the park and 0.29 fewer days in the region (Table 16), implying that many users would simply have stayed in other accommodation.

Of TNP transport users, 19% would have changed their stay in the region if the concessioned product had not been available. Of those, 36% would have changed their stay in the park. The average user of a transport concession would have stayed 0.19 days more in the park and 0.22 days less in the district if there had been no concession available. The longer stay in the park in the absence of concessions might be due to the fact that those who would still have come to the district would possibly have replaced walking the Crossing with taking a round trip, of longer duration, within the park. Given the estimated

TABLE 16. EFFECTS OF TONGARIRO NATIONAL PARK (TNP) CONCESSIONS ON CLIENT ITINERARIES AND SPENDING PER PERSON IN 2005.

SELF-PREDICTED OUTCOME IF CONCESSION WAS NOT AVAILABLE	ACCOMMODATION CONCESSIONS	TRANSPORT CONCESSIONS
In TNP		
Would change stay	61%	36%
Mean change in stay	-1.01 nights/person	+0.19 nights/person
Mean change in expenditure	-\$109/person	? *
In Taupo-Ruapehu region		
Would change stay	20%	19%
Mean change in stay	-0.29 nights/person	-0.22 nights/person
Mean change in expenditure	-\$31/person	-\$25/person

* Not known. Spending in the park would differ enormously from typical daily average spending.

average daily expenditure for each group, this implies that, in the absence of concessions, there would have been a reduction in expenditure in the district of \$31 per person for those that stayed at concessioned accommodation and \$25 for those that used the transport and guiding concessions.

Users of ATNP concessions spent 2.37 additional days in the region. If they had not been able to use the concession, the average kayak concession user would have spent 0.81 fewer days in the park and a further 1.56 fewer days¹⁷ elsewhere in the region.

From the responses of clients on day trip concessions to FNP, the average day-concession user spent 3.46 days in Southland District and would have spent 0.28 fewer days in the district if he/she had not been able to use the concession. Clients also said that they would have spent 0.08 extra days in the park if the concession had not been available.¹⁸ Given the exploratory nature of this component of the study, including time and budget limitations, all days in concessioned accommodation were considered to be additional to what the client would otherwise have spent in the Southland District.

In the case of accommodation concessions for FNP (including overnight, guided trips on the Milford, Hollyford and Routeburn Tracks), it was assumed that because the concession was available, there was an increase in expenditure in the Southland District equivalent to the expenditure on the concession.¹⁹ For

¹⁷ It was feasible to add together the concession impact and the impact on visitor stays by adjusting the visitor stay elsewhere in the region to reflect time that was spent at the concession and would otherwise have been spent elsewhere in the region. Hence, it is assumed that kayaking transfers spending away from other typical activities, which people would have otherwise undertaken in that time.

¹⁸ This is possibly because concession operators got clients into and out of the park faster than clients could have on their own. A number of respondents commented that this more efficient use of their time was precisely the reason they used concession activities.

¹⁹ Those using these concessions were not surveyed. The assumption was based on discussions with managers of the concessions involving overnight accommodation, who said that in their view the majority of clients would not otherwise have come to Southland. Many of these visitors would have spent a little more money in the district during their visit (e.g. visit a restaurant in Te Anau), but offsetting this would be the few who, if they could not have used the concessioned accommodation, would have spent time elsewhere in the district.

day-trip concessions, it was assumed that if visitors had not spent money on the concession, they would have undertaken some alternative activity of equivalent cost, making the concession impact simply a transfer of economic activity between businesses within the district. It was also assumed that it was only when visitors spent more time in the region that spending increased.²⁰ Hence, the net impact on district spending of day-trip concessions was the increase in time that people spent in the district because the concession existed and the implied increase in expenditure that was associated with this increase in stay. These were very conservative assumptions, because some people who stayed in the district might not have found alternative commercial activities to replace the concessioned activity. It would have been too liberal to assume that the impacts of the day-trip concessions could have been added to the change in visitor expenditure due to the extended stay of the day-trip visitors.

7.3 NET ECONOMIC IMPACT OF THE CLIENTS' USE OF CONCESSIONS

The previous section estimated the impact of the concession on the duration of the visitors' stays and spending in the district. The net impact of a concession could be zero if an alternative attraction has the same economic impact as the concession. However, a positive impact can occur if the alternative attraction is cheaper, or if the concessioned activity persuades visitors to stay in the district longer than they would otherwise have done. Once the impacts on visitor stays are taken into account, the economic impacts change markedly.

The results presented for the TNP product principally reflect the park's summer use, as only users of the accommodation and the transport concessions were surveyed. It was assumed that users of Ruapehu Alpine Lifts would otherwise not have come to the area in winter had the ski-field services not been available, and hence the entire economic impact of winter skiing was assumed to be dependent on the concession (and, to a lesser degree, the concessions held by the Grand Chateau and Skotel Alpine Resort). Those using Ruapehu Alpine Lifts were not surveyed, because the lift use related primarily to winter use and because a study of the economic impact of the Mount Ruapehu ski fields has previously been completed by the New Zealand Tourism Research Institute (TRI 2002).²¹ The results of the TRI study were used as the best indicator available of total winter economic impacts of Ruapehu Alpine Lifts, regarding skiers and the winter activity. The only adjustment made was to convert the TRI employment figures from a mix of full-time and part-time, seasonal and non-seasonal jobs to FTE jobs, using an employment-to-output ratio that is typical of the concessions surveyed and of other relevant businesses in the region. It was assumed that summer users of the lifts would not have changed the duration of their stay in the district if they had not been able to use the lifts.

²⁰ It was assumed that the decline in expenditure was equivalent to the decline in the number of nights spent in the region multiplied by the average expenditure per day.

²¹ The calculated winter impact (TRI 2002) includes that proportion of the concession accommodation that was due to skiing users. Double counting of this impact has been avoided.

It was also assumed that non-skiing users of the transport and accommodation concessions who said they would still have stayed in the region in the absence of the concession would have used other accommodation or have undertaken other activities of similar cost to the concession. Hence, the loss of regional economic activity was best measured by the decline in average stay multiplied by the average spend per day.

Given the number of users of each type of concession, it was estimated that direct visitor spending generated by the increased stay due to that proportion of concessions that were not skiing-dependent was approximately \$7 million per year. By applying multipliers for the various aspects of visitor spending, the total economic impacts of visitor spending were estimated (Table 17). That proportion of tourism concessions in TNP that did not depend on skiing generated a total (net) economic activity in the Taupo–Ruapehu region of \$10.1 million per year of output, 102 FTE jobs and \$4 million per year of value added, including \$2.5 million per year of household income. Inclusion of the economic activity associated with skiing²² raised the total impact dependent on concessioned activities to \$129.1 million per year of output, 1887 FTE jobs and \$59.9 million per year of value added, including \$38.1 million per year of household income.

Based on the number of kayak-concession users, it was estimated that direct visitor spending in the Nelson–Tasman region, aside from that spent in ATNP, increased by approximately \$3.7 million as a result of the operation of the concessions.²³ Applying multipliers estimated for the various aspects of visitor spending yielded a net economic impact of the tourism concessions in ATNP of an additional \$8.3 million per year in total district output (Table 18). Associated with this was an increase in employment of 121 FTE jobs and value added of \$4.9 million per year, including household income of \$3.0 million per year.

Based on the number of day concession users in FNP, it was estimated that direct visitor spending in the region, apart from that spent on overnight concessions, increased by approximately \$19 million as a result of the operation of the concessions. Estimated district multipliers for the various aspects of visitor spending were applied to the direct additional visitor spending, and yielded a conservative estimate for net district economic impact associated with tourism concessions in FNP of an increase in output of \$51 million per year. Associated with this was an increase in employment of 280 FTE jobs and value added of \$17 million per year, including household income of \$9 million per year (Table 19).

²² As estimated by New Zealand TRI, March 2002.

²³ This takes into account the fact that if visitors had not been using the concession, then they would have spent their time elsewhere in the region.

TABLE 17. NET IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN THE TAUPO-RUAPEHU REGION IN 2005.

CONCESSION IMPACT	DIRECT OUTPUT (\$MILLION/YEAR)	EMPLOYMENT (FTE)	VALUE ADDED (\$MILLION/YEAR)	HOUSEHOLD INCOME (\$MILLION/YEAR)
Non-skiing-related	10.1	102	4.0	2.5
Skiing-related	119.0	1785	55.9	35.6
Total concession-dependent impacts	129.1	1887	59.9	38.1

TABLE 18. TOTAL IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN THE NELSON-TASMAN REGION IN 2005.

CONCESSION IMPACT	OUTPUT (\$MILLION/YEAR)		TOTAL EMPLOYMENT (FTE)	TOTAL VALUE ADDED (\$MILLION/YEAR)	TOTAL HOUSEHOLD INCOME (\$MILLION/YEAR)
	DIRECT	TOTAL			
Concession	4.6	7.5	73	3.8	2.3
Extended stay in rest of district	3.7	5.1	48	1.1	0.7
Total impacts (rounded)	8.3	12.6	121	4.9	3.0

TABLE 19. NET IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN SOUTHLAND DISTRICT IN 2005.

CONCESSION IMPACT	OUTPUT (\$MILLION/YEAR)		TOTAL EMPLOYMENT (FTE)	TOTAL VALUE ADDED (\$MILLION/YEAR)	TOTAL HOUSEHOLD INCOME (\$MILLION/YEAR)
	DIRECT	TOTAL			
Overnight concession impact	*	20.0	100	9.0	5.0
Extended stay in rest of district	19.0	31.0	180	8.0	4.0
Total impacts (conservative)	*	51.0	280	17.0	9.0

* Suppressed for reasons of confidentiality.

8. Discussion and conclusions

The purpose of this study was to assess the direct and secondary socio-economic effects of concession-based tourism on adjacent communities and regional economies in selected New Zealand case-study areas. Specifically, using information about Tongariro, Abel Tasman and Fiordland National Parks (TNP, ATNP and FNP, respectively), and one each of their gateway communities and district(s) (National Park Village and Taupo–Ruapehu region; Marahau and Nelson–Tasman region; Te Anau and Southland District), the research addressed the following questions (taken from section 1):

- What is the social (community) context of concession-based tourism in the three case-study communities?
- What are the features of tourism concessioned businesses and their products and services?
- Are the socio-economic effects of concessioned tourism activity measurable?
- If so, what are those effects on the economic activities in the local community and region?
- What factors influence the importance of concession-based tourism on the community?

Table 20 presents a general summary of the findings of this study. These findings, and specifically those about the economic impacts of concession-based tourism, are further developed in sections 8.1–8.4, while section 8.5 provides a brief summary of the methodological considerations of assessing the socio-economic impacts.

8.1 SOCIAL CONTEXT OF CONCESSION-BASED TOURISM

Each of the gateway communities was a major entry point to the adjacent national park, although not necessarily the only entry point. These communities are located in rural landscapes with a natural character and local traditions unique to the region. They are all communities with small populations.

Each national park is an important visitor destination and an integral part of the regional tourism product. FNP and TNP are established destinations in which large-scale tourism activity has been part of the business environment since tourism began in these areas in the 19th century (which included government ownership). Commercial tourism activity in ATNP really began only in the mid-1980s, with the introduction of kayaking services. A boom in kayaking and water transport activity followed in the mid-1990s.

Each region has a large proportion of the concessioned businesses located within it, with varying numbers of businesses present in the gateway communities.

TABLE 20. SUMMARY OF THE FEATURES OF CONCESSIONS-BASED TOURISM DERIVED FROM THE THREE CASE-STUDY AREAS.

CATEGORY	FINDINGS
Features of concessioned tourism businesses	<ul style="list-style-type: none"> • There was a concentration of activity-based products. • The distribution of concessioned businesses reflected the proximity of the national park (except for guiding activities). • The relationship with visitor demand and travel pattern was not entirely clear. • Businesses in ATNP were young and small, whilst in TNP and FNP they were established and old, reflecting the maturity of the respective destination. • There was a wide range of enterprises, from very large-scale, intensive ones to small, low-impact ones. • Most were run by owner-operators.
Socio-economic effects on gateway community and region	<ul style="list-style-type: none"> • Employee numbers ranged from 0 to over 700. • Peak season employment was up to 3–4 times higher than that of the low season. • Operators preferred to employ locals, although this was not necessarily feasible. • It was generally possible to obtain staff with the right skills. • Turnover ranged from very little to very large. • The majority of operators were able to earn an income. • Concessioned tourism added pressure on the local infrastructure but also supported the needs of gateway communities. • There was high seasonality.
Other influencing factors	<ul style="list-style-type: none"> • There is potential for greater integration with regional tourism marketing. • There is potential for further linkages with other tourism businesses and other sectors. • TNP also has a gateway community in the park. • Gateway communities provide services for visitors outside the park. • There is still plenty of potential for additional concessioned products. • There is opportunity for increased cooperation of gateway communities with the management of adjacent protected areas.

Half of FNP's businesses were dispersed throughout New Zealand, but of the 89 businesses that operated in the park, 32 were located in the gateway communities of Te Anau and Manapouri. The majority (26) of the 38 businesses operating in ATNP were based in the Nelson–Tasman region, including five in Marahau. Most of the TNP operators were based in the Taupo–Ruapehu region, with four actually based in Whakapapa Village, inside the park.

Te Anau has been a destination and a gateway for a long time, whereas Marahau has become a gateway and low-key holiday destination for bach-style holidays much more recently. The role of National Park Village as a gateway is greatly affected by the presence of a gateway community (Whakapapa Village) inside the national park, making the park largely 'self-contained' in terms of visitor services. Each gateway had a very high dependency on tourism.

8.2 FEATURES OF THE TOURISM CONCESSIONED BUSINESSES STUDIED

The tourism industry in TNP and FNP appeared to be stable. In contrast, both the concessioned and non-concessioned tourism sectors serving ATNP recently saw many changes, with the acquisition of the two pioneer kayaking companies by large enterprises (Wakatu Incorporation and Shotover). Several of the ATNP operators identified the consolidation of businesses and arrival of large corporations—the arrival of ‘big business’—as an issue. Ownership of a business, in terms of a business being legal and local, was identified as an important factor by several operators in each of the case-study locations, with some smaller businesses in particular commenting that preference should be given to local companies.

The majority of the concessioned businesses in the case-study locations were small-scale operations, but a significant feature was the existence of a few large enterprises that largely drove the concessioned sector. In each park, the commercial tourism activity was generally concentrated, although low-impact, small-scale activities such as guided walking were dispersed throughout each park. A significant feature of concessioned tourism activity in TNP was its large-scale, high-impact infrastructure, dominated by the ski fields. The concessioned product in ATNP was low impact and small scale, and was mainly based on a single product (guided kayaking). The scale of concessioned tourism activity and the range of products in FNP were considerable but varied according to location. This was partly a result of the size of the park (it is the largest national park in New Zealand) and the topography (rugged and largely inaccessible), which necessitated transport of provisions and dictated concentration of activity.

For each park, the guided concessions were the largest category by concessionaire numbers.²⁴ Guided walking is characterised by generally being small scale and low impact, requiring little in the way of entry/establishment costs.²⁵ A number of local companies have taken up this opportunity, although a large proportion of guided walking concessions are held by companies located elsewhere in New Zealand or internationally. Generally, this product was not the largest contributor in terms of employment and turnover to tourism impact, although in the case of FNP, it may have been responsible for a large proportion of visitors that intensively used some sites in the park, creating social and ecological stresses.

One or several large employers were the drivers of concessioned employment. The employment in TNP generated by the concessioned tourism product was driven by Ruapehu Alpine Lifts, which was by far the largest employer in the park. Likewise, Real Journeys in FNP was one of the key employers in the park (based on concessioned activity). There has been no single dominant employer to date in ATNP, but one may yet emerge with the merging of a number of the operations since 2003.

Owing to the dependency of the concessioned activities on suitable weather conditions and market preferences, each of the locations showed significant seasonal variability. TNP’s winter concessioned product (skiing) drove visitation

²⁴ Most of the concessions for TNP were club lodges, which were outside the scope of this study.

²⁵ Except for guided walking on Fiordland’s Great Walks, where accommodation is provided.

to the Taupo-Ruapehu District. TNP's concessioned employment during the summer season was only one-tenth that of the high, winter season, reflecting the large dependency on the skiing product; however, tourism operators benefited from the development of a summer season based on transporting independent visitors walking the Tongariro Alpine Crossing Track. The summer activity in this park can still be expanded, as signalled in the draft park management plan (DOC 2003). The dependency on suitable winter weather was clearly demonstrated for TNP, where the poor snow years and volcanic activity during the 1990s decreased ski-field use and visitors. FNP is a summer destination, and peak season summer employment for Fiordland's concessionaires was about 50% as much as the region's annual FTE level. Employment during the low season in FNP concessioned activity was about one-third of the total FTE generated by the park's concessioned activities. The Nelson-Tasman region was also a summer destination and employment levels of ATNP's concessionaires were about three times higher in summer than in winter. ATNP's peak season was twice the total FTE generated by the concessioned activities. ATNP's peak season employment was twice the total FTE generated by the concessioned activities. For all three locations, a combination of weather, topography and park management mean that all three parks will continue to be affected by seasonality; developing the low season potential was raised by several operators.

The relative importance attributed to the concessioned businesses by the operators and visitors surveyed was interesting. Both the operator and the visitor were asked about the features of the product that attracted the visitor (Table 21). Operators in all three parks said that the location of the activity and the park itself were key features, as well as the natural landscape and iconic status

TABLE 21. ROLE OF THE CONCESSIONED TOURISM PRODUCT IN ATTRACTING VISITORS FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON INTERVIEWS CONDUCTED IN 2004/05.

Source: Operator interviews and visitor surveys.

	TNP	ATNP	FNP
Features that attract visitors to the concessioned product			
Operator	<ul style="list-style-type: none"> • Accessibility • Iconic features of the park and accommodation • Natural features • Convenience • Operator timetable 	<ul style="list-style-type: none"> • National Park • Operator infrastructure • Diversity of activities 	<ul style="list-style-type: none"> • Natural environment • Operator
Visitor	<ul style="list-style-type: none"> • Location • Part of tour package • Convenience • Constraints 	<ul style="list-style-type: none"> • Activity • Location 	<ul style="list-style-type: none"> • Convenience • Operator
Importance of the concessioned product in attracting visitors to the region			
Operator	<ul style="list-style-type: none"> • Very important 	<ul style="list-style-type: none"> • Very important 	<ul style="list-style-type: none"> • Very important/important
Visitor	<ul style="list-style-type: none"> • Not important 	<ul style="list-style-type: none"> • Primary purpose of trip or one of several reasons 	<ul style="list-style-type: none"> • One of several reasons

of the area. In addition to these natural features, operator characteristics such as group size, quality of service, uniqueness of the product, safety, facilities, the accessibility they provide into the park, convenience, the diversity of activities and the operator infrastructure (both concessioned and non-concessioned) were important. These features were similar to those described by the visitor: location, convenience, the activity itself and the operator.

8.3 ECONOMIC EFFECTS OF TOURISM CONCESSIONS

8.3.1 Qualitative look at the economic effects

Each of the gateway communities was affected by the concessioned tourism activity in different ways.

National Park Village accommodation providers were capitalising on the summer visitor intending to walk the Tongariro Alpine Crossing Track by providing transport or linking with transport operators taking passengers to walk the Crossing. During the winter, the township benefited less, as there was a large amount of accommodation available within the park (club ski lodges and commercial accommodation providers).

While the Marahau community was affected by the large amount of traffic movement generated by the commercial tourism activity (locally-owned tractors with trailers transport the water taxi and kayaking equipment to and from the launching beach), operators also said that tourism opportunities in ATNP meant that locals could stay and make a living. One operator described the changes in terms of the park's two key gateway communities:

In the past, the Abel Tasman had no profile, but Kaiteriteri was the place to go. Kaiteriteri has become very commercial but Marahau has maintained its naturalness values. Marahau has changed a lot and Wakatu's aspirations are likely to change Marahau again.

Te Anau, in particular, appeared to be successful as a gateway community, although there was a large dependency on tourism, including concession-based tourism. There were many linkages between the local operators, and the tourism businesses also contributed to the improvement of services and facilities within the township. A number of FNP operators saw concessioned tourism benefiting the gateway community.

In general, Te Anau lives or dies based on concession operators. Since 1888, people have come to walk the Milford Track. Take it away, you will have nothing left. Even people coming in on a bus will end up with an operator. The community needs them and benefits hugely from them.

One operator said:

...people wouldn't come if they couldn't do activities. Concessionaires provide activities. Without concessions, Te Anau wouldn't be what it is.

Another operator said:

Concessions held collectively by Te Anau operators are very important. If they didn't have a concession, they probably wouldn't have the other part of the business either.

The majority of operators in the three case-study locations generally identified economic benefits from tourism and, in particular, the concessioned tourism activity. With economic effects, they included generating employment and revenue at the local and regional level, as well as income for local businesses and residents. Operators in TNP and FNP emphasised the way that tourism activity helped to generate a variety of goods and services in the area. ATNP operators stated that tourism contributed to attracting investment in the area and commented on local attitudes (positive and negative) to tourists, opportunities to meeting interesting people and the ability to share aspects of the local culture. FNP operators particularly emphasised the linkages between one effect and another. For example, the employment and economic effects were seen to not only generate revenue for local people, but also to cause people to remain in the community because they were employed. In addition, having a steady population assisted the local school:

...with employment you get people staying here and schools, other businesses, etc. Businesses attract tourists in so you get more flow on effects.

These operators also commented on the additional services that they provided, such as search and rescue. Operators in TNP and ATNP made much less comment on visitor or social benefits. Table 22 shows the range of effects mentioned by the operators.

Generally, benefits and downsides of the concessioned activity were considered indistinguishable from the effects of non-concessioned tourism activities. Most operators considered that, overall, benefits from concessioned activity were part of the wider tourism picture:

All commercial operators view themselves as being in one basket, that is kayaking, water taxis, etc.

TABLE 22. SUMMARY OF OPERATOR PERCEPTIONS OF THE EFFECTS OF CONCESSIONED TOURISM IN THE CASE-STUDY NATIONAL PARKS, COMMUNITIES AND REGIONS BASED ON DATA COLLECTED IN 2004/05.

EFFECT ON	PERCEIVED BENEFITS	PERCEIVED DOWNSIDE
Economy	<ul style="list-style-type: none"> • Generate revenue • Employment • Business linkages 	<ul style="list-style-type: none"> • Seasonality
Community	<ul style="list-style-type: none"> • Life and vitality of the community • Services and facilities in the community 	<ul style="list-style-type: none"> • Pressures on infrastructure • Pressure on staff accommodation
Visitor experience	<ul style="list-style-type: none"> • Visitor awareness • Park-based attractions and activities* 	
National park environment	<ul style="list-style-type: none"> • Contribution to conservation • Concessions management system* • Quality of natural environment* 	<ul style="list-style-type: none"> • Illegal operators* • Concessions management system*

* These features were considered to be unique to the concessioned activity.

Some operators believed that concessioned and non-concessioned tourism had similar benefits:

There is no real difference but businesses that have a concession have more red tape to go through.

Other operators said:

No differentiation here really whether businesses have a concession and don't have a concession [for visitors and business]. The contribution to the community is still the same.

To communities, the benefits are the same, to businesses there is a difference; concessions are a barrier to entry.

For individual businesses, the concessioned activity was of great benefit if the business was greatly dependent on it.

Clearly, operators in all three case-study locations believed that, overall, the concessioned product was either important or very important in attracting people to the region (see also Table 22). Visitors' views, however, were not quite so consistent. For the summer visitor to the Taupo–Ruapehu region, the concessioned product was not an important reason for the visit. Winter visitors were not surveyed, but it was assumed that for this visitor the skiing concessioned product would be the primary reason for coming to the district. Visitors to the Nelson–Tasman region said that the concessioned product was the primary purpose of the trip or one of several reasons. This is indicative of the iconic status of ATNP in the region's tourism sector as well as in international marketing. For Southland visitors, the concessioned product was one of several reasons for visiting. It would appear that most visitors come to the area for the park itself and the attractions at Milford Sound. The positioning of the concessioned product in a region's tourism marketing is worthy of further exploration.

From an economic impact and community development perspective, the most 'valuable' park visitors are those who stay in the region adjacent to the park, spending money on accommodation, in souvenir shops, in restaurants and on other commercial activities, usually in gateway communities outside the park. Concession users did not generally spend a significant amount of money while engaged in activities within the park; most spending generally took place outside the park, especially when visitors stayed overnight in the area. In other words, the longer a park visitor can be encouraged to stay in the region before or after their park visit, the more the local or regional economy is likely to benefit.

The results of this study should enable the development of appropriate indicators to measure the contribution of concession-based tourism in the future. Although this was beyond the scope of this study, a suggested suite of indicators that requires further development is provided in Appendix 3.

8.3.2 Quantitative look at the economic effects

This study found that the concessioned component of park-based tourism is measurable as a distinct component of the overall park tourism use and that its economic effect can indeed be assessed as a distinct part of regional tourism activity.

Findings on concessions' effects were presented in section 6 and summarised in Tables 11 and 12. Here, they are presented in terms of the regional economy (Table 23). While the figures for the three parks refer only to that proportion of the business that was due to the concessioned product (any other, non-concessioned tourism activities carried out by the operator were not included), the concessioned sector alone clearly makes a sizeable contribution to the regional tourism economy.

In particular, the total direct output by TNP concessioned activity was estimated at \$30 million per year, with an additional \$13 million in flow-on effects. This means that for every dollar generated by the concessioned product, a further 40 cents of spending in the region were generated. Every job in the TNP concessioned tourism economy (450 FTEs) generated 0.30 jobs elsewhere. It was estimated that the park's tourism concessions generated about 14% of Ruapehu-Taupo's tourism employment (Table 23).

In Nelson-Tasman, a larger region with a much more diversified industry base (only 12.5% of the economy depended on tourism) and higher levels of visitor arrivals, total output by the concessioned activity was estimated at \$4.6 million per year, with an additional \$2.9 million in flow-on effects (Table 23). Every dollar generated led to a further spending of 60 cents in the region. Every job in the ATNP concessioned economy (53 FTEs) generated 0.40 jobs elsewhere, although this represented only about 1% of Nelson-Tasman's tourism employment.

TABLE 23. COMPARISON OF DIRECT AND TOTAL ECONOMIC IMPACTS OF CONCESSION OPERATIONS (EXCLUDING IMPACTS OF LONGER VISITOR STAYS IN THE DISTRICT) FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON DATA COLLECTED IN 2004/05.

	TNP TAUPO-RUAPEHU DISTRICTS & REGION	ATNP NELSON-TASMAN DISTRICTS & REGION	FNP* SOUTHLAND DISTRICT & REGION
Output (\$million/year)			
Direct	30.0	4.6	51.0
Total [†] in district	43.0	7.5	64.0
Total in region's tourism	2833	5365	7321
Employment (FTE)			
Direct	450	53	320
Total in district	570	73	375
Total in region's tourism	17900	32990	40076
Value added (\$million/year)			
Direct	14.0	2.4	21.0
Total [†] in district	20.0	3.8	29.0
Total in region's tourism	1315	2396	3040
Household income (\$million/year)			
Direct	11.0	1.6	10.0
Total [†] in district	14.0	2.3	14.0
Total in region's tourism	631	1245	1529

* The FNP figures represent the concessioned tourism activity of businesses located in Te Anau and Manapouri only.

[†] Total includes direct, indirect and induced impacts of the concession operations.

The FNP concessioned tourism product generated a total output of \$51 million per year, with a further \$13 million in flow-on effects. For every dollar of spending, a further 30 cents of spending was generated in the regional economy. Every FNP concessioned tourism job (there were 320 FTEs) led to a further 0.20 jobs. This represented nearly 10% of Southland's tourism employment and about one-third of the Fiordland tourism employment (Table 23).

The differences in the flow-on effects of concessioned activity between the case studies is a reflection of the diversity of the scale and type of concessioned tourism activity and of the regions' economies (Figs 6–8). The flow-on effects of TNP and FNP were smaller than those of ATNP, reflecting the limited manufacturing base and business support services in the regions surrounding TNP and FNP.

The concessioned tourism of ATNP had many more significant linkages into the economy than in the other two regions, despite its smaller values in terms of turnover and employment. The multiplier effects, however, show that the concessioned product of ATNP had twice the effect in terms of output and employment as that generated by FNP concessioned tourism activity, and 1.5 times that of FNP (Table 24). As stated earlier, for confidentiality reasons, the multiplier for each of the sectors cannot be made available.

The literature review provided in section 2 showed that output (sales) multipliers increase as one moves from rural to small metro to larger metro regions, reflecting the increased circulation of money within more developed regions. Job-to-output ratios usually move in the other direction, owing to the generally larger firms and economies of scale in more developed regions, and their usually higher wages and fewer part-time and seasonal jobs. Service sectors are more labour intensive, creating more jobs and greater personal income per dollar of sales (Stynes & Sun 2003).

TABLE 24. OVERALL CONCESSION MULTIPLIERS USED FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

	TNP	ATNP	FNP
Output	1.4	1.6	1.3
Employment	1.3	1.4	1.2
Value added	1.4	1.6	1.4
Household income	1.3	1.4	1.4

Not only did DOC tourism concessions in national parks generate very considerable amounts of economic activity directly, they generated net impacts in the region that were between two-thirds and four times as great as the direct impacts of the concessions themselves, once the impacts on visitor stays were taken into account (even after taking into account the fact that the activity at

the concessions may have been transferred from other businesses in the district) (see Table 24).

Tourism concessions in TNP generated almost 1900 FTE jobs in the Taupo–Ruapehu Districts, as well as \$60 million of value added, including \$38 million of household income (Table 25). This net economic impact was about four times the direct impacts of the concessions themselves. As for employment, the impacts were dominated by Ruapehu Alpine Lifts, which drove all skiing-related impacts of the region, and these made up more than 90% of total economic impacts in the district.

Figure 6. Comparison of direct and indirect output in the three case-study areas.

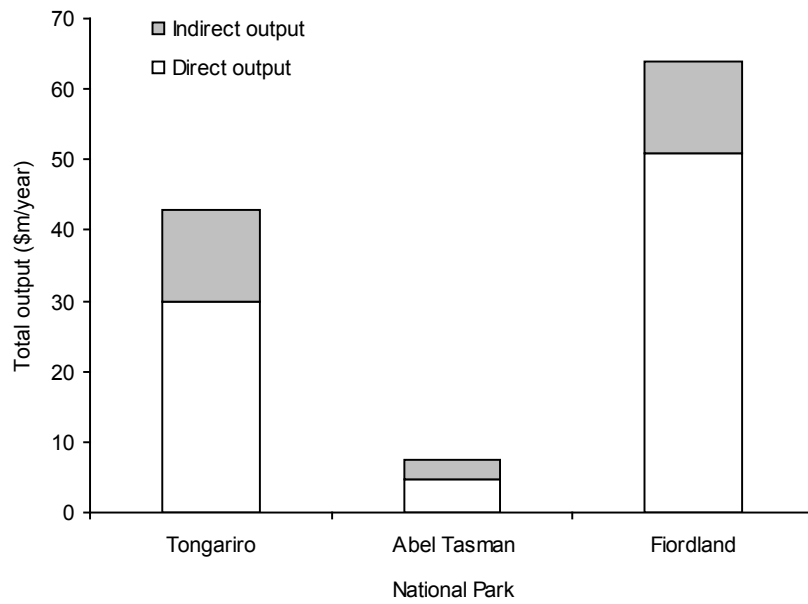


Figure 7. Comparison of direct and indirect employment in the three case-study areas.

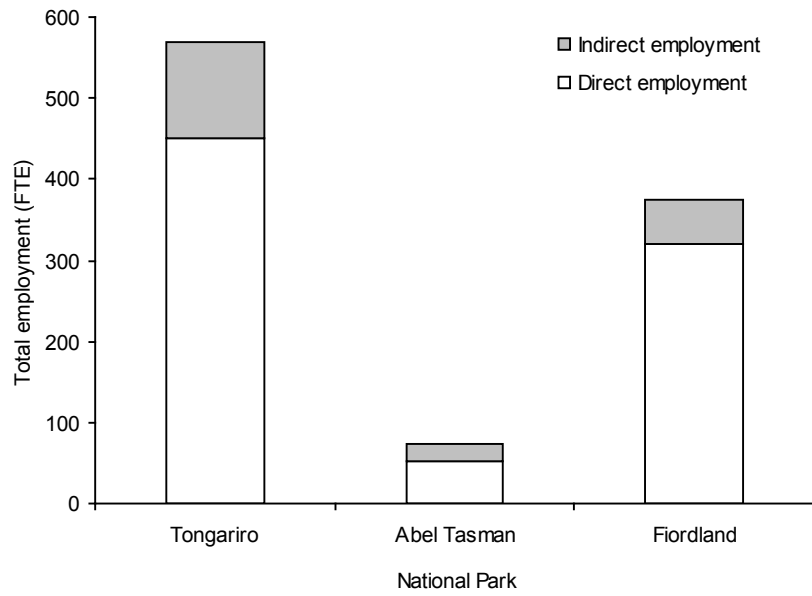


Figure 8. Comparison of direct and indirect value added in the three case-study areas.

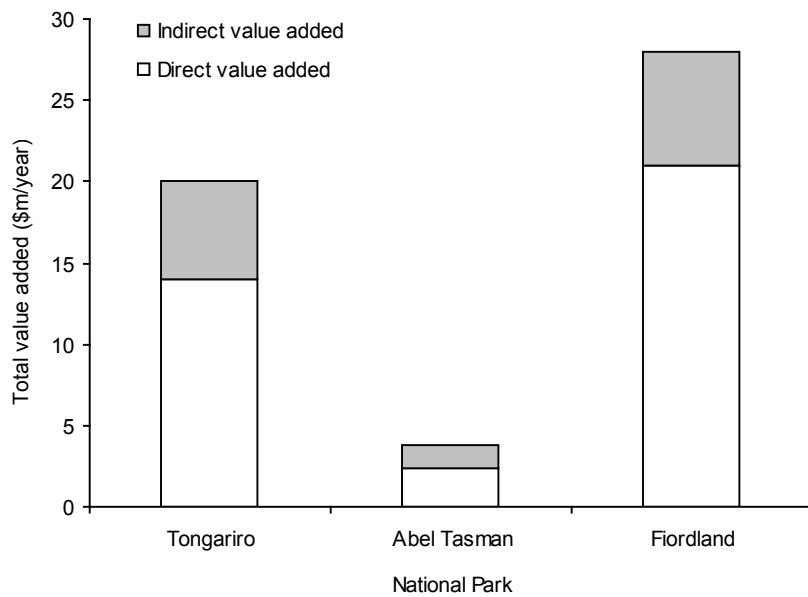


TABLE 25. COMPARISON OF TOTAL NET IMPACTS OF CONCESSIONS ON THE SURROUNDING DISTRICT(S) FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON DATA BASED COLLECTED IN 2004/05.

	TNP			ATNP	FNP
	NON-SKIING-RELATED	SKIING-RELATED	TOTAL		
Output (\$million/year)	10.1	119	129.1	12.5	51
Employment (FTE)	102	1785	1887	120	280
Value added (\$million/year)	4.0	55.9	59.9	5.0	17
Household income (\$million/year)	2.5	35.6	38.1	3.0	9

Tourism concessions in ATNP generated 120 FTE jobs in the Nelson–Tasman Districts, as well as \$5.0 million per year of value added, including \$3.0 million per year of household income (Table 25), which was about twice the direct impacts of the concessions themselves.

Tourism concessions in FNP generated, at a conservative estimate, 280 FTE jobs in Southland District, as well as \$17 million per year of value added, including \$9 million per year of household income (Table 25). This was only 90% of the direct economic impacts of the concession, which contrasted with the situation in the other national parks. These effects reflect the fact that the longer stay and associated higher spending (\$19 million) by clients of day-trip concessions was less than the revenue generated by those on one-day concessions. This, in turn, indicates that a significant part of the visitor expenditure on day-trip concessions was a transfer away from other forms of expenditure.

The estimates of the impact of the concessioned product on visitor itinerary and the subsequent impact on the regional economy must be interpreted with caution. This area of work is exploratory, and has not sufficiently taken into account differences in spending and the primary purpose of using the concessioned product across visitor segments, especially for FNP. The TNP component has excluded the winter concession user, although evidence of low visitation levels during no-snow seasons provided a reasonable parallel. The FNP study considered only the day visitor and not visitors staying overnight, either at accommodation provided with guided walking on the Great Walks or in the concessioned commercial accommodation within the park. Further work in this area would be valuable.

8.4 FACTORS THAT INFLUENCE THE EFFECT OF CONCESSIONED TOURISM

It was anticipated that a number of factors would influence the contribution concessioned tourism is able to make to the local communities and regional economies. Features identified from the literature as reducing that influence included the likelihood of businesses being small scale and young with high levels of seasonality; natural resource dependence, which while relatively effective (compared with urban areas) in generating employment and income, was affected by higher levels of income leakage; and problems locating local

labour supply. Other factors that were anticipated to be relevant were the community's economic dependence on tourism, nature of land ownership and stage of lifecycle (i.e. the maturity of the concessioned businesses).

The magnitude of the socio-economic effects of concession-based tourism in the three national parks appears to be a function of a number of features (see Table 20), including factors that can be considered characteristic of:

- The gateway community and regional economy
- The concessioned business
- The concessioned tourist
- Tourism planning, management and marketing

For each of the communities studied, the national park was a basis for the local economy, which will be affected by DOC management policies that have the potential to generate or constrain development opportunities. For example, the TNP management plan (DOC 2003) signals that no further development will take place in the park and that DOC expects additional services in the future such as accommodation to be provided by the communities surrounding the park. Likewise, at the time of writing, DOC was drafting a new management plan for ATNP, which may result in changes to the way tourism concessions are allocated, which, in turn, will affect the businesses (local and elsewhere) that currently have a concession.

All commercial tourism activity taking place in TNP is concession-based. This is not the case in ATNP and FNP. Both these parks have significant non-concessioned commercial activity. ATNP is interspersed with private land containing private and commercial accommodation, and both private land and the park are supported by commercial water transport businesses (water taxis) that do not require a concession but are a significant feature. Likewise, road transport (along Milford Road) through FNP to Milford Sound, aircraft overflights and the cruise-ship industry on Milford Sound (and all sounds) do not require a concession.

In all three case-study locations, most of the operators commented on the role of the concessions management system and the way this system affected their business activity. The number of concessions was identified as an issue for many operators. This encompassed a view that DOC intended to cap numbers in some locations. Cost, compliance and process were seen as factors that hindered the concessions management system, as well as timeframes and DOC's commercial naïvety. Operators expressed particular concern about the inconsistent way in which the concessions approval process was being applied and that, generally, concession applications were not declined by DOC, creating pressure on the natural and business environments. The need for permits to operate on conservation lands was largely supported, as it was seen to provide a regulatory environment that avoided possible damage to the resource.

Interestingly, a number of operators identified the marketing of a national park or a particular product as being a key factor in affecting the impacts of concessioned tourism:

Overseas clients will be drivers [for new products] as kiwis don't really use concessions much. So you need to create something iconic before the international visitor leaves home. You need a lot of time and money. Current operators attach themselves to existing icons. That is why Milford Sound has been overrun—it is iconic. There is a lot of potential but it won't be easy.

Among operators, there was variable awareness of the role of their product in the region's visitor attractions and of the potential for linkages, which reflected the maturity of the destination. This could affect the cooperation between operators and the marketing/branding of the tourism products.

8.5 METHODOLOGICAL CONSIDERATIONS

The selection of case studies depended on the potential to separate the economic effects of concessioned tourism activity from the effects of tourism overall. This was achieved for all three locations. The effects of concessioned tourism were measurable in terms of their contribution to the regional tourism economy, although there are many linkages between the non-concessioned commercial activity in FNP and ATNP. It was more difficult to separate the social effects of concessioned tourism from those of tourism overall.

A limiting factor when conducting business surveys is the sensitive nature of the information required. When making economic impact assessments, the use of an independent economist is essential, particularly as most operators are concerned about how their turnover/output information may be used—for example, they fear it may be used by DOC for auditing or compliance purposes (as opposed to understanding the activity's economic contribution). DOC, however, already asks for information from the operators at the end of each year, and it is recommended that this data collection and recording of the operator returns by DOC be improved to help validate estimates.

Improved regional economic information is also important. This study was limited by the fact that only two economists have prepared regional input-output tables for New Zealand. Furthermore, there is some information available about tourism at the RTO level, but this is aggregated from national-level information.

Decisions about which visits and spending should be counted need to take into account the decision-making by the visitor. This means identifying the visitor's primary purpose for the trip to a region, which could affect (as it did in this study) the importance of the concessioned product in attracting visitors to the region, or the importance of the park to the visitor when deciding to come to the region. Economic impact estimates rely largely on accurate estimates of the number and kinds of visitors and their spending patterns. Consistency in approach, especially when estimating the number and types of visitors to a park, is essential. For useful guidance on conceptual and practical issues associated with developing comparable park use data collection, refer to Stynes & Sun (2003) and Stynes (2005).

9. Recommendations

Economic impact analysis is a valid approach to quantifying the relationship between national parks and local economies. While this report's case-study approach has been useful in highlighting the measurability of the concessioned tourism activity, it is recommended that DOC develops a systematic approach to measuring the economic impacts of all tourism use of national parks. The MGM2 approach employed by the American National Parks Services (see section 2.5) may be suitable: it provides an efficient, nationwide and regular survey of the economic effects of park-based tourism. A systematic methodology will also provide opportunities for DOC, the Ministry of Tourism, Statistics New Zealand, regional tourism organisations and local territorial authorities to collaborate on identifying and gathering key datasets. Collaboration will mean that no one party has to bear the full, rather high costs of conducting economic impact assessments.

From a regional economic perspective, the most 'valuable' park visitor is one who can be encouraged to spend money in the area adjacent to the park, particularly in gateway communities. It is, therefore, important that a region's and national park's marketing campaigns be aligned to encourage park visitors to stay in the region before and/or after their park visit.

There is also greater potential for operators to cooperate within their region to form stronger linkages between the tourism product inside the park and that outside the park, to encourage longer visitor stays and increased spending. This already happens in Te Anau (although this is limited by the community's overall dependence on the national park). There appears to be considerable competition between the TNP operators, perhaps caused by varying interpretations of 'local'. This study may help to highlight the significant economic contribution that the local operators, that is, those operators from within the same region, make together.

National parks operate in a regional context, and in the same way that many of the opportunities and impacts on parks come from the region, opportunities and impacts from the activities within the park also affect the surrounding communities. It has been shown that gateway communities and regions around the parks depend heavily on tourism. For that reason, there needs to be greater integration of national park management plans with the community and economic development and planning processes of the surrounding regions. Examples include: recognising the economic reliance of the gateway communities on the national park; identifying opportunities for development outside the park to service park visitors; reducing the significance of the park's seasonality impact on the region; allowing reasonable 'lead in' times for restrictions on activities, especially where these are linked to icon attractions and international marketing; and increasing understanding of the commercial operating environment of the park's concessioned businesses.

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11. References

- Ap, J.; Crompton, J.L. 1993: Residents strategies for responding to tourism impacts. *Journal of Travel Research* 32: 47-50.
- APR Consultants 2005: EDANZ economic monitoring report March 2005 Quarter. Prepared for Venture Southland, Rotorua.
- Archer, B.; Cooper, C.; Ruhanen, L. 1998: The positive and negative impacts of tourism. Pp. 79-102 in Theobald, W.F. (Ed.): *Global tourism*. Butterworth Heinemann, Oxford.
- Booth, K.; Leppens, J. 2002: Rakiura National Park: a benchmark study of tourism and the Stewart Island community prior to the creation of the National Park. Prepared for Southland Conservancy, Department of Conservation, Invercargill (unpublished).
- Butcher, G.V. 1985: Regional income, output and employment multipliers: their uses and estimates of them. Cost benefit handbook Volume 4. Ministry of Agriculture and Fisheries, Wellington. 74 p.
- Butcher, G.; Fairweather, J.R.; Simmons, D.G. 1998: The economic impact of tourism on Kaikoura. Kaikoura Case Study Report No. 8/1998. Tourism Research and Education Centre, Lincoln University, Lincoln.
- Butcher, G.; Fairweather, J.R.; Simmons, D.G. 2000: The economic impact of tourism on Rotorua. Rotorua Case Study Report No. 17/2000. Tourism Research and Education Centre, Lincoln University, Lincoln.
- Butcher, G.; McDonald, G.; Fairweather, J.R.; Simmons, D.G. 2001: The economic impact of tourism on Westland District. Westland Case Study Report No 26/2001. Tourism Research and Education Centre, Lincoln University, Lincoln.
- Butler, R.W. 1980: The concept of a tourism area cycle of evolution: implications for the management of resources. *Canadian Geographer* 24: 5-12.
- Butler, R.W.; Hall, C.M.; Jenkins, J. (Eds) 1998: *Tourism and recreation in rural areas*. John Wiley and Sons, Chichester. 261 p.
- Cessford, G.; Thompson, A. 2002: Managing tourism in the New Zealand Protected Area System. *Parks* 12(1): 26-36.
- Clough, P.W.J.; Meister, A.D. 1989: Benefit assessment of recreational land: the Whakapapa Area, Tongariro National Park. *Natural Resource Economics Discussion Paper No. 13*. Department of Agricultural Economics and Business, Centre for Agricultural Policy Studies, Massey University, Palmerston North. 89 p.
- Cocklin, C.; Flood, S. 1992: The socio-economic impacts of establishing marine reserves. Department of Geography, University of Auckland, Auckland.

- Cosslett, C.; Buchan, D.; Smith, J. 2004: Assessing the social effects of conservation on neighbouring communities. Guidelines for Department of Conservation staff. *Department of Conservation Technical Series 29*. Department of Conservation, Wellington. 68 p.
- CREA (Centre for Regional Economic Analysis) 2000: The contribution of the Parks and Wildlife Service's estate to the Tasmanian economy in 1989/99. Final Report to Department of Primary Industries, Water and Environment. University of Tasmania, Hobart.
- Creswell, J.W. 2003: Research design: qualitative, quantitative, and mixed methods approaches. Sage Publications, Thousand Oaks, CA. 296 p.
- Davies, M. 2004: The Tongariro Crossing: a management challenge. Staircase Track Restoration Workshop Introduction, March 2004. Department of Conservation, Ruapehu Area Office, Mount Ruapehu.
- Dixon, E. 1999: In the shadow of Ruapehu: community responses to adversity in tourism. A case study of Ohakune. Pp. 146-159 in: Study Group on the Geography of Sustainable Tourism, University of Otago, Centre for Tourism and International Geographical Union. Centre for Tourism, University of Otago, Dunedin.
- DOC (Department of Conservation) 2002: Draft Fiordland National Park management plan. Southland Conservancy, Department of Conservation, Invercargill.
- DOC (Department of Conservation) 2003: Draft Tongariro National Park management plan. Tongariro/Taupo Conservancy, Department of Conservation, Turangi.
- DOC (Department of Conservation) 2005: Annual Report for the year ended 30 June 2005. Department of Conservation, Wellington. 160 p.
- DOC (Department of Conservation) 2007: Fiordland National Park management plan. Southland Conservancy, Department of Conservation, Invercargill. 448 p.
- Eadington, W.R.; Redman, M. 1991: Economics and tourism. *Annals of Tourism Research 18*: 41-56.
- Eagles, P.F.J.; McCool, S.F. 2002: Tourism in national parks and protected areas: planning and management. CABI, Wallingford. 320 p.
- Eijgelaar, E.; van Poelgeest, S. 2001: Socio-economic impacts of the designation of Te Wahipounamu-South West New Zealand World Heritage Area on neighbouring communities. Unpublished BSc Honours thesis, Larenstein International Agricultural College, Velp, The Netherlands.
- Evans, T.R. 1993: Residents' perceptions of tourism in selected New Zealand communities: a segmentation study. Unpublished MSc thesis, Department of Commerce, University of Otago, Dunedin.
- Frechtling, D.C. 1994a: Assessing the economic impacts of travel and tourism—introduction to travel economic impact estimation. Pp. 359-365 in Ritchie, J.R.B.; Goeldner, C.R. (Eds): Travel, tourism and hospitality research. John Wiley, New York.
- Frechtling, D.C. 1994b: Assessing the impacts of travel and tourism—measuring economic benefits. Pp. 367-391 in Ritchie, J.R.B.; Goeldner, C.R. (Eds): Travel, tourism and hospitality research. John Wiley, New York.
- Frechtling, D.C. 1994c: Assessing the impacts of travel and tourism—measuring economic costs. Pp. 394-402 in Ritchie, J.R.B.; Goeldner, C.R. (Eds): Travel, tourism and hospitality research. John Wiley, New York.
- Garland, R. 1984: New Zealand hosts and guests: a study on the social impact of tourism. *Massey University Market Research Centre Research Report No. 39*. Massey University, Palmerston North.
- Gough, G.D.; Ball, R.J. 1995: The contribution of conservation lands to the west coast regional economy. *Centre for Resource Management Information Paper 52*. Lincoln University, Lincoln. 59 p.
- Hall, C.M.; Jenkins, J.M. 1997: The policy dimension of rural tourism and recreation. Pp. 19-42 in Butler, R.W.; Hall, C.M.; Jenkins, J. (Eds): Tourism and recreation in rural areas. John Wiley and Sons, Chichester.

- Hasse, J. 2001: Stakeholder perceptions of tourism development in Marahau/New Zealand: a role for participatory approaches and GIS. Unpublished PhD thesis, Victoria University of Wellington, Wellington.
- Horn, C.; Simmons, D. 2002: Community adaptations to tourism. *Tourism Management* 23(2): 133–143.
- Horn, C.; Simmons, D.G.; Fairweather, J.R. 1998: Evolution and change in Kaikoura: responses to tourism development. Tourism Research and Education Centre (TREC) report 6, Tourism Research and Education Centre, Lincoln University, Lincoln.
- Horn, C.; Simmons, D.G.; Fairweather, J.R. 2000: Evolving community response to tourism and change in Rotorua. Rotorua Case Study Report No 14/2000. Tourism Research and Education Centre, Lincoln University, Lincoln. 141 p.
- Howe, J.; McMahon, E.; Propst, L. 1997: Balancing nature and commerce in gateway communities. Island Press, Washington, DC. 165 p.
- Kerr, G.N.; Sharp, B.M.; Gough, J.D. 1986: Economic benefits of Mt Cook National Park. Centre for Resource Management, University of Canterbury and Lincoln College, Lincoln. 158 p.
- Kerr, N. 1998: The impacts of tourism in remote areas: the case of Haast and Collingwood. Unpublished Masters thesis (Geography), University of Canterbury, Christchurch.
- Lane, B. 1994: What is rural tourism? *Journal of Sustainable Tourism* 2(1): 7–21.
- Latitude Nelson 2003: Tourism Nelson Tasman Ltd Annual Report 2003. Latitude Nelson, Nelson.
- Latitude Nelson 2004a: Key facts—characteristics of tourism in Nelson Tasman Region. Tourism Planning Conference 10/11 August 2004, Nelson Tasman Region.
- Latitude Nelson 2004b: Nelson Tasman Region Trade Directory, 2004. Latitude Nelson, Nelson.
- Latitude Nelson 2004c: Tourism Nelson Tasman Ltd Annual Report 2004. Latitude Nelson, Nelson.
- Lawson, R.W.; Williams, J.; Young, T.; Cossens, J. 1998: A comparison of residents' attitudes towards tourism in 10 New Zealand destinations. *Tourism Management* 19(3): 247–256.
- Machlis, G.E.; Field, D.R. 2000: National parks and rural development—practice and policy in the United States. Island Press, Washington, DC. 324 p.
- Mason, P.; Cheyne, J. 2000: Residents' attitudes to proposed tourism development. *Annals of Tourism Research* 27(2): 391–441.
- Minerbi, L. 1992: Impacts of tourism development in Pacific Islands. Greenpeace Pacific Campaign. Greenpeace International, San Francisco. 76 p.
- Moisey, R. 2002: The economics of tourism in national parks and protected areas. In Eagles, P.F.J.; McCool, S.F. (Eds): *Tourism in national parks and protected areas: planning and management*. CABI, Wallingford.
- Moran, D.; Simmons, D.G.; Fairweather, J.R. 2001: Evolving community perceptions of tourism in Westland. Westland Case Study Report No 24/2001. Tourism Recreation Research and Education Centre, Lincoln University, Lincoln. 105 p.
- NCC (Nelson City Council) 2004: About Nelson. www.nelsoncitycouncil.co.nz/aboutnelson/nelsoninfocus/tourism.htm (viewed 13 Aug 2004).
- NPPA (National Park Progressive Association) 2004: Strategy for the development of National Park Village, 08.02.2004. www.snow.co.nz/clients/nationalpark/Newsletters/showNewsletter.asp?company (viewed 24 July 2004).
- NPWS (New South Wales National Parks and Wildlife Service) 1998: The contribution of Coolah Tops National Park to regional economic development: technical report. Economics and Regulatory Reform Unit, Environmental Policy Division. New South Wales National Parks and Wildlife Service, Hurstville. 35 p.
- NPWS (New South Wales National Parks and Wildlife Service) 1999a: The contribution of Montague Island Nature Reserve to regional economic development: technical report. Economics and Regulatory Reform Unit, Environmental Policy Division, New South Wales National Parks and Wildlife Service, Hurstville. 47 p.

- NPWS (New South Wales National Parks and Wildlife Service) 1999b: The contribution of national parks to sustainable rural and regional economic development: technical report. Economics and Regulatory Reform Unit, New South Wales National Parks and Wildlife Service, Sydney. 20 p.
- NPWS (New South Wales National Parks and Wildlife Service) 2000: The contribution of Warrumbungle National Park to regional economic development: technical report. Conservation Economics Unit, New South Wales National Parks and Wildlife Service, Hurstville. 62 p.
- NPWS (New South Wales National Parks and Wildlife Service) 2001: The contribution of Stuart National Park, Kinchega National Park and Mutawintji National Park to regional economic development: technical report. Conservation Economics Unit, New South Wales National Parks and Wildlife Service, Hurstville. 75 p.
- NPWS (New South Wales National Parks and Wildlife Service) 2002: The economic value of recreational use in protected areas. Collected studies from New South Wales. Conservation Economics Unit, New South Wales National Parks and Wildlife Service, Hurstville. 34 p.
- OECD (Organisation for Economic Cooperation and Development) 1994: Tourism strategies and rural development. OECD, Paris. 94 p.
- Page, S.J.; Getz, D. 1997: The business of rural tourism: international perspectives. Pp. 3–37 in Page, S.J.; Getz, D. (Eds): The business of rural tourism—international perspectives. Thomson Business Press, Oxford.
- Parr, D. 2000: Management practice for allocation of recreation concessions. *Science and Research Internal Report 184*. Department of Conservation, Wellington. 33 p.
- Phillips, A. (Ed.) 2002: Sustainable tourism in protected areas—guidelines for planning and management. World Commission on Protected Areas (WCPA). *Best Practice Protected Area Guidelines Series No. 8*. United Nations Environment Programme, World Tourism Organisation and IUCN—The World Conservation Union, Switzerland. 183 p.
- RDC (Ruapehu District Council) 2001: Strategic Plan review. Ruapehu District Council, Taumarānui.
- RDC (Ruapehu District Council) 2003: Economic analysis of the Ruapehu District, six months ending December 2002. Ruapehu District Council, Taumarānui.
- Ruapehu Bulletin 2004: A good year for Ruapehu. *Ruapehu Bulletin 21(163)*: 1.
- SGL Consulting Group 2005: Statistical profile of visitors to Southland, New Zealand, on-site visitor survey. Prepared for Venture Southland, January 2005.
- Snowdon, P.; Slee, B.; Farr, H. 2000: The economic impacts of different types of tourism in upland and mountain areas. Pp. 137–156 in Godde, P.M.; Price, M.F.; Zimmerman, F.M. (Eds): Tourism and development in mountain regions. CABI Publishing, Oxford.
- Statistics New Zealand 2004: National Park community profile. www.stats.govt.nz/domino/external/web/CommProfiles.nsf/FindInfobyArea/532602-au (viewed 30 July 2009).
- Stephens, R.J.; Wells, C. 1983: The regional economic and social impact of Punakaiki National Park. Victoria University of Wellington, Wellington.
- Stuart P.; Pearce D.; Weaver A. 2005: Tourism distribution channels in peripheral regions: the case of Southland, New Zealand. *Tourism Geographies 7(3)*: 235–256.
- Stynes, D.J. 1997: Economic impacts of tourism. www.msu.edu/course/prr/840/econimpact/pdf/ecimpvol1.pdf (viewed 23 June 2010).
- Stynes, D.J. 2005: Economic significance of recreational uses of national parks and other Public lands. *Social Science Research Review 5(1)*: 1–36.
- Stynes, D.; Sun, Y. 2003: Economic impacts of national park visitor spending on gateway communities. Systemwide estimates for 2001. Department of Park, Recreation and Tourism Resources, Michigan State University, East Lansing.
- Taumarānui County Council 1985: National Park Village future prospects: tourist development or not? Report compiled by Taumarānui County Council, July 1985, Taumarānui.

- Taylor, C.N.; Bryan, C.H.; Goodrich, C.G. 2004: Social assessment: theory, process and techniques. 3rd edition. Social Ecology Press, Middleton, WI. 194 p.
- Taylor, C.N.; Gough, J.; Warren, J.; McClintock, W. 1991: Social and economic impacts of Kahurangi National Park. *Science for Conservation 119*. Department of Conservation, Wellington. 62 p.
- TDC (Tasman District Council) 2001: On the beach—how the future management of the Abel Tasman foreshore is shaping up. *Newsline The Mag 27*, published by TDC, September 2001.
- Tolisano, J. 2000: Bridging culture and nature: an international perspective to national parks and rural development. Pp. 244–265 in Machlis, G.E.; Field, D.R. (Eds): National parks and rural development—practice and policy in the United States. Island Press, Washington, DC.
- Tourism Resource Consultants 2005: Southland tourism strategy 2005–2015. Commissioned by Venture Southland, June 2005, Southland. 72 p. www.southlandnz.com/Portals/0/Documents/Visit/SouthlandTourismStrategy.pdf (viewed 23 June 2010).
- TRCNZ (Tourism Research Council New Zealand) 2003: New Zealand regional tourism forecasts 2004—2010. www.trcnz.govt.nz/Data-Analysis/Forecasts/Forecast-Tourism-to-NZ-Regions/ (viewed 30 July 2009).
- TRI (Tourism Research Institute) 2000: The local economic impact of the Mt Hutt ski area. Ski Areas Association of New Zealand (SAANZ) Research Report, March 2000. Tourism Research Institute.
- TRI (New Zealand Tourism Research Institute) 2002: Mount Ruapehu ski fields: an economic impact study. A study for the Ski Areas Association of New Zealand. Auckland University of Technology, Auckland. 45 p.
- TRREC (Tourism Recreation Research and Education Centre) 2004: Tourism planning toolkit for local government. www.tourism.govt.nz/Our-Work/Local-Government-/Tourism-Planning-Toolkit/ (viewed 30 July 2009).
- Venture Southland 2005: *Economic Bulletin 2, June 2005*.
- Warren, J.A.N.; Taylor, C.N. 1999: Developing rural tourism in New Zealand. Centre for Research, Evaluation and Social Assessment, Wellington. 95 p.
- Williams, J.; Lawson, R. 2001: Community issues and resident opinions of tourism. *Annals of Tourism Research 28(2)*: 269–290.
- Yin, R.K. 1994: Case study research design and methods. *Applied Social Research Methods Series Volume 5*. Sage Publications, Thousand Oaks, CA. 60 p.

12. Glossary

Direct economic impact Direct impact arising from the initial spending by visitors on the goods and services they want to consume. Direct employment is of people who produce and sell goods and services directly to tourists. Direct output is the value of purchases made by tourists. Direct value added is the value added in those businesses that sell directly to tourists.

Downstream impacts/effects Impacts that are not driven by an activity's demand for extra inputs, but that might arise as a result of a particular activity. An example in concessioned tourism would be where the development of guided walking led to people staying longer in the district and hence to an increased demand by visitors for accommodation and food. The accommodation and food are not inputs into the guided walk and hence are not an indirect or induced effect of the walk; they are a downstream effect.

Employment Work done by employees and self-employed persons, measured in Full-Time Equivalent jobs (FTEs). A person working part time all year is deemed to be equivalent to 0.5 FTEs. Where it was apparent that the part-time work was quite limited, and information was available on the approximate hours worked per week, the FTEs of a part-time job were based on 35 hours per week per FTE. Hence, 10 hours per week is 0.3 FTEs. Where work was seasonal, the conversion to FTEs was based on 12 months work per year. So a seasonal worker working full-time for 6 months per year is 0.5 FTEs, and a part-time seasonal worker working 10 hours per week for 4 months is 0.1 FTEs.

Flow-on effects (upstream impacts) The sum of indirect and induced effects.

Gross economic impact The dollars-based effect before the negative effects on other businesses from which the concession has attracted visitor spending are deducted.

Household income The gross income of a household, including the income of self-employed persons. There is sometimes considerable uncertainty about the proportion of business income that goes to households, especially for small businesses. In assessing this proportion, dividends and interest payments to local householders have been excluded. Conceptually, they should be included, but it is difficult to be clear what proportions of these items have gone to local households. When estimating indirect economic impacts, one needs to know the increase in household income that occurs in a region and how it will be spent. When owners of business capital lived outside the district, dividends and interest did not form part of the district household income. Even where the owners did live in the district, profits that were not used for household spending did not lead to economic impacts.²⁶

²⁶ Profits may be invested back into the district, but the impacts of this investment were excluded on the grounds that the investment could have been financed by borrowing and hence would not have been dependent on the earlier profits.

Indirect economic impacts/effects Indirect impacts arise from increased spending by businesses as they buy additional inputs so that they can increase production to meet visitor demand. This indirect effect can be envisaged as an expanding ripple effect. A tourist buys food and drink at a café. The café has to employ more staff and buy more bread, so the bakery output expands. The bakery has to employ more staff and buy more electricity, so the power company increases its output. The power company has to increase its maintenance, so it employs another person and spends more on a vehicle for that person. All the increased employment, output and value added (apart from that at the café) are the indirect effect. Note that indirect effects include only 'upstream' effects (via buying more inputs) but do not include any stimulated development downstream. So, although an expansion of 'tourism activities' may lead to more tourists and hence an expansion of accommodation, the extra accommodation is not included as a flow-on effect of the activity, and hence is not included in the multiplier.

Induced economic impacts The result of increased household income being spent, leading to a further ripple effect of increased employment, output and income.

Multipliers Type I: the ratio of (direct + indirect) impacts to direct impacts; Type II: the ratio of (direct + indirect + induced) impacts to direct impacts. Type II multipliers include the impact of household spending and hence will always be greater than Type I multipliers. Both multipliers will always be greater than 1. Note that downstream effects (whether positive or negative) are not included in the multiplier, and must be calculated separately.

Net economic impact The impact of a concession after deducting the effects of transfers from other businesses and after taking into account any downstream effects caused by a change in the duration of stay (and so level of expenditure) in the district associated with the existence of the concession.

Output The value of sales by a business. In the case of wholesale and retail trade, it is the total value of turnover (and not simply the gross margin).²⁷

Total economic impacts Type I: the sum of the direct and indirect impacts; Type II: the sum of direct, indirect and induced impacts.

Transfer effects When turnover or some other economic feature is transferred from one business to another with no net impacts.

Value added Includes household income (wages and salaries and self-employed income) and returns to capital (including interest, depreciation and profits), as well as all direct and indirect taxes. Value added is conceptually the same as business and personal income. In accounting terms, it is business earnings (before interest, tax and depreciation) plus wages and salaries.

²⁷ Care has to be taken in combining retail sales figures with employment per \$million of output from input-output tables. In these tables, output is generally defined as gross margin. By contrast, business statistics figures usually give employment per \$million of turnover.

Appendix 1

EXAMPLE OF AN OPERATOR INTERVIEW SCHEDULE

Date: _____
 Operating Name of Business: _____
 Business Location: _____
 Name of Interviewee: _____
 Position of Interviewee: _____
 Interview Number: _____

SECTION 1: Tourism products, including those requiring (and not requiring) a DOC concession

In this first section, I am interested in learning about your business and in the tourism products or services you provide in the Nelson-Tasman region, including those requiring a DOC concession.

1. What year did your business begin?

2. What year did you take over?

3. Please tell me about the types of tourism products or services you provide in the region. Discussing each tourism product in turn, what is the tourism product, does it require a concession, when was this product introduced, and where are these tourism products or services mainly located.

a) Which tourism products and services do you provide?	b) Does this product require a DOC concession?	c) Which year was this product introduced?	d) Where is this tourism activity mainly located?
1.			
2.			
3.			
4.			

5.			
6.			
7.			
8.			

4. What other tourism products or services do you provide outside of this region?

a) Tourism products and services	b) Does this require a DOC concession	c) Principal location/s
1.		
2.		
3.		
4.		
5.		

5. Where do the owners of this tourism business principally reside?

- In Marahau
- Elsewhere in Nelson–Tasman region
- Elsewhere in New Zealand
- Internationally

6. What are your reasons for being in the tourism industry?

7. Which of these is your main reason?

8. What industry did you work in and in which location before you became involved in this tourism business?

8a. Industry _____

8b. Location _____

SECTION 2: Employment and income generation

This section asks about employment generation and income. I am interested in details about your tourism business overall in the Nelson–Tasman region as well as your concession-based business. If you find it difficult to separate business details associated with local concessions from overall tourism business details, please give your best estimate.

9. I want to ask you about the number of people who worked in your tourism business for the last financial year for the high and the low season. Please include owner-operators and permanent staff.

9a. Which months do you consider constitute the high or busy season? _____

9b. How many full-time male and female staff do you employ during the busy season?

(M) _____ (F) _____

9c. How many part-time male and female staff do you have?

(M) _____ (F) _____

9d. How many Full Time Equivalent staff do you employ in the busy season? _____

9e. Which months do you consider constitute the low or quiet season? _____

9f. How many full-time male and female staff do you employ during the quiet season?

(M) _____ (F) _____

9g. How many part-time male and female staff do you employ during the quiet season?

(M) _____ (F) _____

9h. How many Full Time Equivalent staff do you employ in the quiet seasons? _____

10. What percentage of staff time is dedicated to the concession-based product/s?

10a. Busy season _____%

10b. Quiet season _____%

11. What was your wages bill (including your own drawings) for the most recent financial year?

\$ _____

Not available

Refused

12a. How do you expect the number of people employed in your business to change in the next 2 years?

- Increase
- Decrease
- No change
- Don't know

12b. Please explain why you anticipate this change:

13a. Do you employ members of the local permanent population?

- Yes (go to b)
- No (go to c)

13b. If yes, are there any specific reasons why you employ locals?

13c. If no, are there any specific reasons why you do not employ locals?

14a. Are you able to recruit staff with the skills your business needs?

- Yes
- No

14b. If yes, what skills have been the most difficult to obtain?

The next couple of questions are about business turnover and income.

15. What was your total tourism turnover for the last financial year?

\$ _____

- Not available
- Refused

16. What percentage of your total turnover is attributable to your concession product/s?

_____ %

17. Which one of your concession-based products generates the best profit?

18. Were you able to take personal drawings from the business in 2002/03?

- Yes
- No

If yes, how much did you draw in total in 2002/03?

\$ _____

- Not available
- Refused

19. From what other sources do you derive income?

- Other business
- Paid employment
- Income support (e.g. super, etc.)
- Private income (e.g. shares, dividends)
- Other (*please specify*) _____

SECTION 3: Expenditure

We would like to estimate the flow on effects of your business on the rest of the regional economy.

We have employed an independent economist, Geoff Butcher, to do this. Geoff has worked extensively in calculating economic impacts of tourism. He has built up a regional economic model to do this, but he wants to get some additional data for his model about the income and expenditure patterns of the concessions businesses themselves (rather than averages for all recreation—which includes things such as horse racing and libraries).

He would need to sit down with you for half an hour and go through your last available set of annual accounts to identify what you buy and where you buy it from. The information will be combined with other industry data and then used to estimate industry multipliers for the concessions industry.

This information will be confidential to Geoff only, and will not be released to any other party. The information gathered may be used in reports and presentations but any data that could possibly identify an operator will not be reported.

Would you be happy to sit down with Geoff and give him this data?

- Yes
- No

He will give you back the estimated multipliers for your business as well as the averages for the entire concessions industry when this is published.

SECTION 4: Visitors and what attracts them

This section asks about the visitors who purchase your concession-based products, and what attracts them.

20. In the last financial year, what were your total visitor numbers for all your tourism product/s?

Do not know

Refused

21. What proportion of these visitors were international? _____%

22. In the last financial year, what were your total visitor numbers for your tourism product/s requiring a DOC concession?

Do not know

Refused

23. What proportion of these concession-based visitors were international? _____%

24. For your concession-based products, what were the three most common *countries* of origin, in order of visitor numbers?

1. _____

2. _____

3. _____

25. Has there been any change in the mix of visitors to your concession-based product/s in the last 2 years?

Yes

No

If yes, please describe: _____

26. What features of your concession-based product most attract your visitors?

27. How important do you think the type of concession-based product you provide is for attracting visitors to the region in general?

Very important

Important

Not important

SECTION 5: The benefits and downsides of tourism activity

In this section I am interested in your views about the effects that concessions-based tourism has on local communities. For the following questions, please think of Marahau as a local community, and effects concession businesses may have on its economy, community, infrastructure, other visitors, and the environment.

28. What benefits do concession businesses specifically bring to the local community?

29. Which of these benefits are also provided by non-concession tourism businesses?

30. What downsides do concession businesses specifically have on the local community?

31. Which of these downsides are also caused by non-concession tourism businesses?

SECTION 6: Tourism growth and opportunities for the future

In this section, I am interested in your views on tourism growth and future opportunities in Marahau for tourism in general and concessions-based tourism.

32. How do you think the number of tourists in Marahau will change over the next 5 years?

- Decrease
- Increase
- Stay pretty much the same

33. What do you see as the main factors affecting tourism growth in the area?

34. Do you think current concession-based tourism products will have a specific effect on tourism growth in the area?

- Yes
- No
- Don't know

If yes, what effects are these: _____

35. What are the main concession-based products that could be developed in the area?

36. Are there barriers to people taking advantage of these concession-based opportunities?

- Yes
- No

If yes, please describe _____

37. Local Government New Zealand are interested in your views on funding of core facilities, such as public facilities and infrastructure. What are your views on visitors paying for public facilities or targeted tourism rates to contribute to infrastructure such as toilets, water, sewerage, etc.?

38. We are at the end of the interview—do you have any other comments?

THANK YOU very much for your cooperation.

Appendix 2

EXAMPLE OF A VISITOR SURVEY

Visitor Survey

Tongariro National Park Concession Client Survey

Date: _____ Interviewer: _____ Case-Study Area: _____ Operator: _____
Number: _____

Hi, my name is _____ and I'm doing a survey about businesses which operate in national parks for the Department of Conservation. To do this, we need to find out something about the people who use these businesses. I have a questionnaire which takes just a few minutes to complete. Would you mind answering some questions about your visit to Tongariro National Park for me? All your answers will be completely confidential.

Check: Are they staying / have stayed a night at this accommodation provider? If yes, proceed to Q1. If no, close interview. If a group, choose person 15 years or over with next birthday.

1. Where do you normally live? Please show the map of the Ruapehu/Taupo Districts
- Ruapehu/Taupo Districts
 - Elsewhere in New Zealand
 - Overseas

2. What is the main activity you are doing with this operator?
-

3. Who are you doing this activity with? Precoded. Do not show answers. Please tick one box only.
- | | |
|---|---|
| <input type="checkbox"/> Visiting alone | <input type="checkbox"/> Friends/family/partner mix |
| <input type="checkbox"/> Partner/spouse | <input type="checkbox"/> Business associates |
| <input type="checkbox"/> Friends | <input type="checkbox"/> Special interest group |
| <input type="checkbox"/> Family | <input type="checkbox"/> Other (specify) _____ |

4. How many people are in your group, including yourself? _____ people

For the following questions, please show the interviewee the map of the Ruapehu/Taupo Districts.

5. How many nights have you been in the Ruapehu/Taupo Districts so far? If you have been in the Ruapehu/Taupo Districts for less than 24 hours, please provide number of hours.
 a. _____ nights b. _____ hours
6. How many nights in total do you expect to stay in the Ruapehu/Taupo Districts? If you expect to stay in the Ruapehu/Taupo Districts for less than 24 hours, please provide number of hours.
 a. _____ nights b. _____ hours
7. What is your main form of accommodation while you are in the Ruapehu/Taupo Districts?
 Precoded. Do not show answers. Please tick one box only.
- Motel, hotel, cabin, B&B, lodge, backpackers, rented home
 - Public campground
 - Owned seasonal home
 - Stay with friends or relatives in the area
 - DOC campground or hut
 - Other (please specify) _____
8. Please give your best estimate of the expenditure of your whole group in the 24 hours before your group started this activity. If your group has been in the region less than 24 hours, give expenditure so far plus an estimate of accommodation costs for your group's first night in the Ruapehu/Taupo Districts.

Type of Spending	What is the amount spent by your <u>whole group</u> in the 24 hours <u>before</u> your group started this activity in NZ\$
a. Accommodation	\$ b. is this an estimate Yes / No
c. Transport / fuel costs	\$
d. Food / drink at eating out places	\$
e. Retail (groceries, souvenirs, clothes, etc.)	\$
f. Entertainment, activities, attractions	\$
g. Other (please specify) _____	\$

9. Was the type of service provided by this operator?
- The primary purpose of your trip to the Ruapehu/Taupo Districts
 - One of several reasons for your trip to the Ruapehu/Taupo Districts
 - Not an important reason for your trip to the Ruapehu/Taupo Districts
10. If this type of service was not here, would you have still come to the Ruapehu/Taupo Districts?
- Yes (go to question 11)
 - No (go to question 17)
 - Maybe (go to question 11)
11. Would you have stayed the same number of nights in the Ruapehu/Taupo Districts as you currently intend to?
- Yes (go to question 13)
 - No (go to question 12)
12. How many fewer nights or extra nights would you have stayed in the Ruapehu/Taupo Districts?
- a. _____ fewer nights OR b. _____ extra nights

You have been thinking about the Ruapehu/Taupo Districts. The next questions are about the Tongariro National Park only. Please look at the map to see the Tongariro National Park.

13. How many nights have you spent or do you intend to spend in Tongariro National Park on this trip?
- _____ nights
14. If the type of service you have used today was not available, would you still have come to Tongariro National Park?
- Yes (go to question 15)
 - No (go to question 17)
 - Maybe (go to question 15)
15. Would you have stayed the same number of nights in Tongariro National Park?
- Yes (go to question 17)
 - No (go to question 16)

16. How many fewer or extra nights would you have stayed in Tongariro National Park?
 a. _____ fewer nights OR b. _____ extra nights
17. What are your reasons for using a commercial operator?

18. Which of these reasons is your main reason?

19. If you had the opportunity, would you use this operator again?
 Yes
 No
20. What was the main source of information you used to find out about this service? Precoded. Do not show answers. Please tick only one box.
- | | |
|--|--|
| <input type="checkbox"/> Newspaper, books, magazines | <input type="checkbox"/> Visitor centres |
| <input type="checkbox"/> Pamphlets, posters | <input type="checkbox"/> Someone told me |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Used operator before |
| <input type="checkbox"/> Internet/web | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Films, television | <input type="checkbox"/> Have not seen any information |

Thank you very much for your time today. Enjoy the rest of your holiday

Appendix 3

SUGGESTED INDICATORS TO MEASURE SOCIO-ECONOMIC EFFECTS

SOCIO-ECONOMIC INDICATOR	DATA SOURCE AND METHOD
Tourist	
Numbers	Visitor survey, DOC concession returns, operator survey
Total number of tourist visits/visitors annually	
Number of park visits/visitors	
Number of concession visitors	
Proportion of day visits	
Visitor characteristics	Visitor survey, Ministry of Tourism data, RTO data, previous studies
Nationality / place of residence	
Personal profile characteristics	
Day/overnight proportion of park users	
Domestic/international	
Visit characteristics	Visitor survey
Visit group type and size	
Main reason for visit	
Length of stay in park/region	
National park influence on visit	
Concessioned activity influence on visit	
Source of information	
Use of tracks (day/overnight)	
Activities undertaken	
Use of facilities/services	
Accommodation used	
Used operator before	
Visitor expenditure	Visitor survey
Average daily expenditure in park	
Average daily expenditure in region	
Total visitor expenditure	
Tourism business	
Business operation	Operator survey, interviews with DOC and industry managers, concession returns
Employment (FTE) by type	
Salary/wages by type	
Turnover	
Visitor numbers	
Proportion of business due to concessioned product (turnover, employment and visitor numbers)	
Expected growth	

Continued on next page

SOCIO-ECONOMIC INDICATOR	DATA SOURCE AND METHOD
Involvement in tourism planning	Operator survey, interview with DOC and tourism industry managers
Interest of operators	
Preferred form of involvement	
Participation in concession workshops	
Tourism inventory	DOC statistics, operator survey
Number of providers by type	
Number of concessions held by businesses in gateway community/region	
Community lifestyle	
Demographic profile	Residents' survey, census
Number of residents	
Age, gender, ethnicity of residents	
Length of residence	
Income and employment	Residents' survey, census
Employment (by sector)—5 years ago/current	
Personal income	
Regional planning and management	
Integration	Stakeholder survey, demonstration of integration between community plans and national park management plans
Involvement by industry and community in planning (regional/district plans, tourism, conservation)	
Benefits from tourism (personal, community, conservation)	

What effect does concession-based tourism have on communities and economies?

Concessioned tourism activity was measured during 2004-2005 in three case-study areas: Tongariro, Abel Tasman and Fiordland National Parks. This activity not only contributed directly to the economy, but was also important to employment in the region. The magnitude of the effect of the concessioned product on the visitor itinerary was influenced by the composition of the gateway community, features of the region's tourism sector, park management, visitor characteristics and features of the concessioned product. Recommendations are made for encouraging longer visitor stays and increased spending in the wider region.

Wouters, M. 2011: Socio-economic effects of concession-based tourism in New Zealand's national parks. *Science for Conservation* 309. 90p.